```
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
```

OM protein - protein search, using sw model

February 27, 2005, 20:02:49; Search time 115.869 Seconds (without alignments) 1387.712 Million cell updates/sec Run on:

US-10-040-647-6 1728 1 MGARGALLIALILARAGLRK......PSWPLLFFPLLWALPLIGPV 314

Title:
Perfect score: 3

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

1612378 seqs, 512079187 residues Searched:

1612378 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

UniProt_03:*
1: uniprot_sprot:*
2: uniprot_trembl:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

								•																									
	-	Description	Q9y6m0 homo sapien	_	Q80yd8 mus musculu	Q80z40 rattus norv	Q7rty9 homo sapien	Q920s2 mus musculu	Q9d4i3 mus musculu	Q6bea2 rattus norv	Q6ie60 rattus norv	O9nrr2 homo sapien	Q96rz8 homo sapien	xeno	Q8bjr6 mus musculu	Q16651 homo sapien	Q9pvx7 xenopus lae	_	_	Q6nvr7 xenopus tro	Q99144 mus musculu	Q9es87 rattus norv	. Q8rla6 mus musculu	Q640f8 xenopus lae	Q6gnk3 xenopus lae	Q80x17 mus musculu	Q9esd1 mus musculu	Q9dgr3 xenopus lae	Q9qul7 mus musculu	Q8bjv6 mus musculu	Q7rty5 homo sapien	mus	Q6pf94 mus musculu
	-	1										-																					
SUMMARIES		ΠD	TEST HUMAN	TEST_MOUSE	Q80YD8	Q80Z40	Q7RTY9	Q920S2	Q9D413	Q6BEA2	Oeireo	TRYG HUMAN	Q96R <u>Z</u> 8	Q6DJ90	QBBJR6	PSS8_HUMAN	Q9PVX7	PR27_HUMAN	Q80X <u>Z</u> 3	Q6NVR7	Q99L44	PSS8_RAT	Q8R1A6	Q640F8	Q6GNK3	Q80X17	PSS8 MOUSE	Q9DGR3	TRYG MOUSE	Q8BJV6	Q7RTYS	Q7M755	Q6PF94
		8	-	-	~	~	~	7	0	(7	7	Н	N	N	N	-	N	۲	~	~	~	Н	0	~	0	N	ч	~	-	~	~	N	~
		Match Length	314	324	336	328	318	322	282	328	321	321	321	719	328	343			311							331	342	317	311	340	336	312	799
	Query	Match	99.7	66.7	66.7	65.3	51.0	49.2	47.3	35.0	34.6	34.5	34.5	33.9	33.9	33.5	33.3	33.2	33.1	33.0	32.8	32.8	32.8	32.8	32.7	32.6	32.6	32.5	32.1	31.9	31.9	31.6	31.4
		Score	1723	1152	1152	1128.5	881	850	817	605	597.5	596.5	595.5	. 985	585	579.5	575.5	573	572.5	570	567.5	567.5	566.5	266	265	563.5	563.5	561	554.5	552	551	546.5	542
	Result	No.	-	7	m	4	ß	φ	7	80	o	10	11	12	13	14	15	16	17	18	19	50	21	22	23	24	25	56	27	28	29	30	31

Q9dbio mus musculu O6dh4 brachydanio Q7tml0 mus musculu Q9xm2 ovis aries O88781 rattus ratt G9gra4 homo sapien Q9drs9 mus musculu P50342 meriones un Q8cfe0 mus musculu Q9erio un Q9xm1 ovis aries Q9r2d1 sus scrofa P26262 mus musculu
TWS6 MOUSE Q6DHH4 Q7TML0 Q7TML0 TRY1 SHEEP 088781 BSS4 HUMAN G6CTS0 Q5CFS0 Q9XSM1 TRY1 MENUN Q6CFE0 Q9XSM1 TRY1 PIG KAL MOUSE
811 309 307 227 2297 314 310 310 271 273 638
11888999999999999999999999999999999999
541.5 541.5 539.5 539.5 536.5 527.5 525 517.5 517.5 517.5
ろろろろろろは 4 4 4 4 4 ろうよらく 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8

ALIGNMENTS

RESU	RESULT 1 TEST HUMAN
E	HUMAN
A	Q9Y6M0; Q9NS34; Q9P2V6;
T E	16-OCT-2001 (Rel. 40, Created)
5 E	10-OCI-2001 (Ref. 40, Last sequence update)
3 2	zo-oui-zook (kei, to, mabu ammodation update) Testisin nrechraor (RC 3.4.21) (Rosinophil serine professe 1) (RSD-
日日	(T)
Z G	Name=PRSS21; Synonyms=ESP1, TEST1;
SO	Homo sapiens (Human).
98	Eukaryotca; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
38	
Z.	
RP	SEQUENCE FROM N.A. (ISOFORM 1).
22	TISSUE=Bosinophil;
2 6	MEDIATORS SPORTS TO STATE TO SELECT TO SELECT TO SELECT SERVICES SPORTS TO SELECT SERVICES SPORTS SP
£ £	INCIDE M., Admos N., ANIOSAWA M., ALMO M.; "Cloning and tissue distribution of a novel serine protease esp-1 from
RT	
RL	Biochem. Biophys. Res. Commun. 252:307-312(1998).
Z.	[2]
R.	SEQUENCE FROM N.A. (ISOFORM 3).
¥ ;	MEDLINE=20068805; PubMed=10600542; DOI=10.1006/bbrc.1999.1870;
Z.	Inoue M., Isobe M., Itoyama T., Kido H.;
RI	"Structural analysis of esp-1 gene (PRSS 21).";
2	Fiochem. Biophys. Res. Commun. 266:564-568(1999).
Z :	[3]
R.	SEQUENCE FROM N.A. (ISOFORMS 1 AND 2).
2 2 3 3	TISSUE-CELVICE CARCINOMA;
\$	
\$ 8	Hooper J.D., NICOL D.L., DICKINSON J.L., EYFE H.J., SCARMAN A.L.,
\$ 8	Normyle J.F., Stuttgen M.A., Douglas M.L., Loveland K.A.,
\$ E	Sucherland G.K., Ancalis I.M.;
1 E	
1 C	Cancer Des 60.3100-1300(1000)
Z Z	Cancer Nes. 10:110-1200(1707).
R D	SECUENCE FROM N.A.
ž	MEDLINE=20461760; PubMed=11004480; DOI=10.1016/S0167-4781(00)00071-3;
æ	Hooper J.D., Bowen N., Marshall H., Cullen L.M., Sood R., Daniels R.,
RA B	Stuttgen M.A., Normyle J.F., Higgs D.R., Kastner D.L., Ogbourne S.M.,
ð	Pera M.F., Jazwinska B.C., Antalis T.M.;
RŢ	"Localization, expression and genomic structure of the gene encoding
RT	the human serine protease testisin.";
Ŗ	Biochim. Biophys. Acta 1492:63-71 (2000).
RN	[5]
몺	SEQUENCE FROM N.A. (ISOFORM 1).
¥ ;	MEDLINE=22887296; PubMed=12975309; DOI=10.1101/gr.1293003;
\$;	Clark H.F., Gurney A.L., Abaya E., Baker K., Baldwin D., Brush J.,
\$ 8	Chen J., Chow E., Chul C., Crowley C., Currell B., Deug P.,
\$ 5	EACON D., FORCE J., GILMAIG C., GU Q., HASS P.E., HEIGHS S.,
Ą	Huang A., Kim H.S., Kiimowski L., Oln Y., Johnson S., Lee J.,

```
TEST MOUSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241
     CARBOHYD
CARBOHYD
                                         VARSPLIC
                                                                             VARSPLIC
                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         51111118
                                                                                                                                                                                                                                                          유
                                                                                                                                                                                                                                                                                                                                  음
                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its mee by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@lsb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              amidated serine (Potential).
Lewis L., Liao D., Mark M., Robbie E., Sanchez C., Schoenfeld J., Seshagiri S., Simmons L., Singh J., Smith V., Stinson J., Vagts A., Vandlen R., Watanbe C., Wieand D., Woods K., Xie M.-H., Yansura D., Yi S., Yu G., Yuan J., Zhang M., Zhang Z., Goddard A., Wood W.I., Godowski P., Gray A.;

"The secreted protein discovery initiative (SPDI), a large-scale effort to identify novel human secreted and transmembrane proteins: bioinformatics assessment.";

Genome Res. 13:2265-2270(2003).

--- FUNCTION: Could regulate proteolytic events associated with testicular germ cell maturation.

--- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Charge relay system (Potential).
Charge relay system (Potential).
Charge relay system (Potential).
Potential.
Potential.
Potential.
Potential.
GPT-anchor amidated serine (Potential).
N-linked (GloNAc. . ) (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Removed in mature form (Potential)
                                                                                                                                                                                                                                                                                                                                                                      Isoid=Q9Y6M0-3; Sequence=VSP 005390;
TISSUE SPECIFICITY: Expressed predominantly in premeiotic
testicular germ cells, mostly late pachytene and diplotene
spermatocytes.
SIMILARITY: Belongs to the peptidase SI family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   InterPro; IPR001254; Pept Ser Cys.
InterPro; IPR001254; Peptidase_S1.
InterPro; IPR001254; Peptidase_S1.
InterPro; IPR001354; Peptidase_S1.
Peam; PF00089; Trypsin; 1.
PRINTS; PR00722; CHYMOTRYPSIN.
PROSITE; PS000134; TRYPSIN DOM; 1.
PROSITE; PS000134; TRYPSIN HIS; 1.
PROSITE; PS000134; TRYPSIN HIS; 1.
Alternative splicing; GlyCoprotein; GPI-anchor; Hydrolase;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Min; 200227, C:Cytoplasm; TAS.
GO; GO:0005624; C:membrane fraction; TAS.
GO; GO:000586; C:plasma membrane; TAS.
GO; GO:0008236; F:serine-type peptidase activity; TAS.
InterPro; IPR009003; Pept_Ser_Cys.
                                                                                                                                                                                                                          (Potential).
-!- ALTERNATIVE PRODUCTS:
Event-Alternative splicing; Named isoforms=3;
Name=1; Synonyms=1;
IsoId=Q9Y6M0-1; Sequence=Displayed;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          protease, Signal, Zymogen.
                                                                                                                                                                                                                                                                                                                                      IsoId=09Y6M0-2; Sequence=VSP_005389;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Potential.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Testisin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EWBL; AF058300; AAD41588.1; --
EWBL; AB031329; BAA83220.1; --
EWBL; AB031331; BAA85321.1; --
EWBL; AF058301; AF79019.1; --
EWBL; AF058301; AAF79020.1; --
EWBL; AY359034; AAC89333.1; --
HSSP; P00734; AGW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Genew; HGNC:9485; PRSS21.
MIM; 608159; -.
                                                                                                                                                                                                                                                                                                                     Name=2; Synonyms=S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Lipoprotein; Serine
SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20
289
289
82
238
238
171
171
171
167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CHAIN
PROPEP
ACT_SITE
ACT_SITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACT_SITE
DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LIPID
CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PROPEP
```

THE THE THE THE TENT TO BE AND BEAR AND

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                             61 LWDSHVCGVSLLSHRWALTAAAHCPETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFBFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PLACHYDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFFWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRAIN=129/Sv;
MEDLINE=21153229; PubMed=11231276;
Scarman A.L., Hooper J.D., Boucaut K.J., Sit M.-L., Webb G.C.,
Normyle J.F., Antalis T.M.,
"Organization and chromosomal localization of the murine Testisin gene encoding a serine protease temporally expressed during
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN=BALB/c; TISSUB=Testis;
PubMed=11259427; DOI=10.1074/jbc.M010422200;
Wong G.W., Li., Madhusudhan M.S., Krilis S.A., Gurish M.F.,
Rothenberg M.E., Sali A., Stevens R.L.;
"Tryptase 4, a new member of the chromosome 17 family of mouse serine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241 PLACNKNGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLL
                                                                                                                                                                                                                                                                                                                                                                                                             61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181 EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                             1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
N-linked (GlCNAc. ..) (Potential)
N-linked (GlCNAc. ..) (Potential)
Missing (in isoform 2).
/FTId=VSP_005389.
                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                            Length 314;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE OF 3-324 FROM N.A.
STRAIN=C57BL/6J; TISSUE=Testis;
MEDLINE=22354683; PubMed=12466851; DOI=10.1038/nature01266;
                                                                                                                                                                                                                                                           0; Indels
                                                                                                                               /FTId=VSP 005390.
34884 MW; E738CF73F6B56E98 CRC64;
                                                                                                       (In isoform 3).
                                                                                                                                                                                                            Score 1723; DB 1;
Pred. No. 1.8e-145;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            090HJ7; 090A14;
16-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
16-OCT-2004 (Rel. 45, Last annotation update)
Testisin precursor (EC 3.4.21.-) (Tryptase 4)
                                                                                                                                                                                                                                                           1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           spermatogenesis.";
Eur. J. Biochem. 268:1250-1258(2001).
                                                                                                    Missing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  . Biol. Chem. 276:20648-20658(2001)
                                                                                                                                                                                                         Query Match 99.7%;
Best Local Similarity 99.7%;
Matches 313; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301 FFPLLWALPLLGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301 FFPLLWALPLLGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STANDARD;
                                                                                                         235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (Mouse)
                                                                                                                                                              314 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=10090;
     200
273
87
                                                                                                         222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Name=Prss21;
```

```
Okazaki Y., Furuno M., Kasukawa T., Adachi J., Bono H., Kondo S., Nikaido I., Osato N., Saito R., Suzuki H., Yamanaka I., Kiyosawa H., Yagi K., Tomaru Y., Hasegawa Y., Nogami A., Schombach C., Golobori T., Baldarelli R., Hill D.P., Bult C., Hume D.A., Quackenbush J., Baldarelli R., Hill D.P., Bult C., Hume D.A., Quackenbush J., Baldarelli R., Hill D.P., Bult C., Hume D.A., Quackenbush J., Balake J.A., Bradat D., Brusic V., Chothia C., Corbani L.E., Cousins S., Dala B., Dragani T.A., Fletcher C.F., Forrest A., Faraer K.S., Gasterland T., Gariboldi M., Gissi C., Godzik A., Gough J., S., Kanai A., Kawaji H., Kawasawa Y., Kadzierski R.M., King B.L., Kanaji H., Kawasawa Y., Kadzierski R.M., King B.L., Maltais L., Marthioni L., Macchioni L., Macchioni L., Miki H., Nagalott D.R., Maltais L., Marthioni L., Macchioni L., Macchada S., Gunda R., Schneider C., Semple C.A., Serou M., Shimada K., Schneider C., Semple C.A., Serou M., Shimada K., Schneider C., Semple C.A., Serou M., Shimada K., Schneider C., Rang Y., Watanabe Y., Wells C., Wyrashaw Boris A., Yanagisawa M., Yang I., Yang L., Warna Z., Zavolam M., Zhu Y., Zimmer A., Carninci P., Hayatsu N., Hirozane-Kishikawa T., Konno H., Nakamura M., Sakau T., Pukuda S., Hara A., Hashizume M., Impara M., Atawa T., Pukuda S., Yasuaiki A., Sakai K., Sasaki K., Shasaki D., Shabata K., Shiasawa I., Malaysis of the mouse transcriptome based on functional annotation of C., Physial R., Sokal M., Shasaki Y., Shasaki X., Shasaki Y., Shasaki X., Shasaki Y., Shasaki Y., Shasaki X., Shasaki X.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (Potential).
-1- TISSUE SPECIFICITY: Testis.
-1- DEVELOPMENTAL STAGE: Expressed in post-meiotic testicular germ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -!- SIMILARITY: Belongs to the peptidase $1 family.
-!- CAUTION: Ref.3 sequence differs from that shown due to a stop codon in position 315.
```

This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute of There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/ or send an email to license@isb-sib.ch).

```
Pfam; PF00089; Trypsin; 1.
PRINTS; PR00722; CHYMOTRYPSIN.
PROSITE; PS50240; TRYPSIN DOM; 1.
PROSITE; PS00134; TRYPSIN HIS; 1.
PROSITE; PS00135; TRYPSIN SER; 1.
Glycoprotein; GPI-anchor; Hydrolase; Lipoprotein; Serine protease;
EMBL; AP304012; AAK29360.1; -.
EMBL; AF176209; AAF64207.2; -.
EMBL; AF176209; AAF64420.2; -.
EMBL; AR206211; -; NOT_ANNOTATED_CDS.
EMBL; AK006271; -; NOT_ANNOTATED_CDS.
EMBL; AK006271; -; NOT_ANNOTATED_CDS.
MEXOPS; S01.011; -.
MGI.1916689; Prss21.
MGO; GO:0000524; C:membrane fraction; IDA.
GO; GO:0000523; P:serine-type endopeptidase activity; IDA.
InterPro; IPR00303; Pept Ser Cys.
InterPro; IPR00313; Peptidase_S1.
InterPro; IPR001314; Peptidase_S1.
Draw Proforms Proform Peptidase_S1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Signal; Zymogen.
SIGNAL
```

Potential. Testisin. Removed in mature form (Potential).

21 54 298 324 95

CHAIN PROPEP ACT_SITE

PROPEP

Potential.

Charge relay system (Potential).

```
48 AELGRWPWGGSLRLWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMP 107
                                                                                                                                                                                                                                                                                                                                                                         61 AELGRWPWQGSLRVWGNHLCGATLLNRRWVLTAAHCFQ--KD-NDPFDWTVQFGELTSRP 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RIDCWVIGWGYIKEDEALPSPHILQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNA 227
                                                                                                                                                                                                                                                                                                                     1 MGARGKTLVPLLVVVATAAWALQSTYLQVDPEKPELQEPDLLSGPCGHRTIPSRIVGGDD 60
                                                                                                                                                                                                                                                                                                1 MGARGALLLALL--LARAGL-----RKPESQEAAPLSGPCGRRVITSRIVGGED 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899; Straubberg R.L., Feingold B.A., Grouse L.H., Derge J.G., Klausner R.D., Collina F.S., Wagner L., Shenmen C.M., Schuler G.D., Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K., Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F., Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L., Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz Brownstein M.J., Uddin T.B., Toshlyuki S., Carninci P., Frange C., Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J., Bosak S.A., McEwan P.J., McKernan K.J., Male Y.G., Hale S., Garcia A.M., Gay L.J., Hulyk S.W., Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
                                                                                                                                                                                                                                    Query Match 66.7%; Score 1152; DB 1; Length 324;
Best Local Similarity 65.0%; Pred. No. 1.9e-94;
Matches 212; Conservative 38; Mismatches 60; Indels 16; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                              ..) (Potential)
..) (Potential)
..) (Potential)
                                                                                                                                  (Potential)
Charge relay system (Potential)
Charge relay system (Potential)
Potential.
                                                                                     Potential.

GPI-anchor amidated asparagine (Potential).
                                                                                                                                                                                                        36175 MW; 56DC59E84F3C3CD4 CRC64;
                                                                                                                               N-linked (GlcNAc. .)
N-linked (GlcNAc. .)
N-linked (GlcNAc. .)
N-linked (GlcNAc. .)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Last sequence update)
Last annotation update)
                                                                                                                                                                                          P -> H (in Ref.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SGMSQPDPSWPLLFFPLLWALPLLGP 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Potential.
Potential.
Potential.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-JUN-2003 (TrEMBLrel. 24, 01-JUN-2003 (TrEMBLrel. 24, 01-MAR-2004 (TrEMBLrel. 26,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Prss21 protein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mus musculus (Mouse)
                                                                                                                               170
177
210
283
275
324 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
TISSUE=Testis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Name=Prss21;
ACT_SITE
ACT_SITE
DISULPID
DISULPID
DISULPID
DISULPID
DISULPID
DISULPID
                                                                                                                                                CARBOHYD
CARBOHYD
CARBOHYD
CONFLICT
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              288
                                                                                                                                  CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q80YD8
Q80YD8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
```

```
Hydrolase, Protease, Serine protease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               298 MIRNGMLRPDPAPLLLFLTLAWA 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MAQSGMSQPDPSWPLLFFPLLWA 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
      Rattus norvegicus (Rat)
                                                  NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              285
                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q7RTY9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 5
    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AELGRWPWQGSLRLWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMP 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEWSLOAYYTRYFVSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFEN 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RIDCWVIGWGYIKEDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNA 227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   228 QGGKDACFGDSGGPLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQ 287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               72
Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A., Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C., Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S., Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E., Jones S.J., Marra M.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 MGARGALILLALL-LARAGL------RKPESQEAAPLSGPCGRRVITSRIVGGED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16; Gaps
                                                                                                                                                                                                                                                        MGD; MGT:1916698; Prss21.

RGG; GO:0005615; C:extracellular space; TAS.

RGG; GO:0005624; C:extracellular space; TAS.

RGG; GO:0004222; F:serine-type endopeptidase activity; IDA.

RGG; GO:0007283; P:spermatogenesis; TAS.

RICHEPPO; IPR001254; Peptidase S1.

RICHEPPO; IPR001314; Peptidase S1.

RICHEPPO; IPR001314; Peptidase S1.

RICHEPPO; IPR001314; Peptidase S1.

REINTS; PR00125; CHYMOTRYPSIN.

RRINTS; PR00125; TYPESIN. 1.

RROSITE; PS00134; TRYPSIN. HIS; UNKNOWN.1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      66.7%; Score 1152; DB 2; Length 336; 65.0%; Pred. No. 1.9e-94;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                 Strausberg R.; Submitted (MAR-2003) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE 336 AA; 37361 MW; E5206FEDBE55C670 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-07N-2003 (TrEMBLrel. 24, Created)
01-07N-2003 (TrEMBLrel. 24, Last sequence update)
01-07N-2004 (TrEMBLrel. 26, Last annotation update)
Eosinophil serine protease-1.
                                                                                                        and mouse cDNA sequences."; Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60;
                                                                                                                                                                                                             -1- SIMILARITY: Belongs to peptidase family Sl
EMBL, BC049588; AAH49588.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 328 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    38; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         288 SGMSQPDPSWPLLFFPLLWALPLLGP 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NGLLRPDPVPLLLFLTLAWASSLLRP 335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hydrolase; Protease; Serine protease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity 65.0% les 212; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRELIMINARY;
                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                       IISSUE=Testis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q80Z40
```

유 ò à 셤 à 요 ò 셤 ઠે

```
45 GEDAELGRWPWQGSLRLWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLT 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             105 SMPSFWSLQAYYTRYFVSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFE 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             118 SRPSLMNLQAYSNRYQIEDIFLSPKYTEQFPHDIALLKLSSPVTYSNFIQPICLINSTYK 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GNAQGGKDACFGDSGGPLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKL 284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 MGARGALLLALLLARAGL-------RKPESQEAAPLSGPCGRRVITSRIVG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 MSARGKTLVPLLVVVVAVBVTLQSTSSHVKPVDPEKPELQEANLLSGPCGHRTIPSRIVG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 GEEAELGRWPWQGSLRVWGWHLCGATILINRRWVITAAHCFQ--KD-NDPFDWTVQFGELT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          165 FENRIDCWVTGWGYIKEDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCA
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Rattus.
                                                                                                                                                                                                                                                                                                                                                                                   ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                            STRAIN=Sprague-Dawley; TISSUE=Testis;
Nakamura Y., Inoue M., Okumura Y., Shiota M., Nishikawa M., Arase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    nemo sapirami (Autuan).
Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 2; Length 328;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 65.3%; Score 1128.5; DB 2; Length Best Local Similarity 63.5%; Pred. No. 2.4e-92; Matches 205; Conservative 40; Mismatches 59; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MERCES, SOLOTIONS.

MERCES, SOLOTIONS.

GO; GO:0004263; F:chymotrypsin activity; IEA.

GO; GO:0004263; F:chymotrypsin activity; IEA.

GO; GO:0004263; F:trypsin activity; IEA.

GO; GO:000508; P:proteolysis and peptidolysis; IEA.

InterPro; IPR001254; Peptidase S1.

InterPro; IPR001314; Peptidase S1.

InterPro; IPR001314; Peptidase S1A.

PROMITS; PR00125; CHYMOTRYPIN.

SMART; SM00020; Trypsin, 1.

PROSITE; PS00134; TRYPSIN, DOM; 1.

PROSITE; PS00134; TRYPSIN, IS; UNKNOWN 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                328 AA; 36631 MW; 7F6C0B204802B963 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QTRIY9;

QTRIY9;

QTAR-2004 (TERMELTEL 26, Created)

QT-MAR-2004 (TERMELTEL 26, Last sequen)

QT-MAR-2004 (TERMELTEL 26, Last annottel 26,
```

44 9 117

224

384448£

ġ

Serie Series Ser

```
176 PRCMVIGWGVLQEDLKPLPPPYHLREVQVSILINNSRCQELFEIFSLHHLITKDVFCAGAE 235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   49 ELGRWPWQGSLRLWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPS 108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60 MOGRWPWQASIRIKKSHRCGGSILISRRWVITAAHCPRKY---LDPEKWTVQLGQLTSKPS 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            109 FWSLQAYYTRYFVSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENR 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       169 TDCWVTGWGYIKED-EALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNA 227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  228 QGGKDACFGDSGGPLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQ 287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 MGIQGPVLLLLLLC-VMLGKPGSREESQAADLKSTDIKLLSMPCGRRNDTRSRIVGGIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRAIN=CS7BL/6J; TISSUB=Testis;
MEDLINE=99279253; PubMed=10349636; DOI=10.1016/S0076-6879(99)03004-9;
Carninic P., Hayashizaki Y.;
High-efficiency full-length cDNA cloning.";
Meth. Enzymol. 303:19-44(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 MGARGALLLALLLARAGLRKPESQEAAP------LSGPCGRRVIT-SRIVGGEDA
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus (Mouse).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          090413;
01-JUN-2001 (TrEMBLrel. 17, Created)
01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
01-MR-2004 (TrEMBLrel. 26, Last annotation update)
01-MR-2004 (TrEMBLrel. 26, Last annotation apdate)
Mus musculus adult male testis cDNA, RIKEN full-length enriched
library, clone:4931440B09 product:TESTIS SERINE PROTEASE-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                             18;
                                                                                                                                                                                                                                                                                                                                                                                                           49.2%; Score 850; DB 2; Length 322; 52.8%; Pred. No. 1.7e-67; ive 43; Mismatches 93; Indels 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
STRAIN=C57BL/61; TISSUE=Testis;
MEDLINE=21085660; PubMed=11217851; DOI=10.1038/35055500;
         Matsui H., Takano N., Takahashi T.;
Submitted (SEP-2000) to the EMBL/GenBank/DDBJ databases.
-!- SIMILARITY; Balongs to peptidase family S1.
EMBL; AB049453; BBE68561.1; -.
HSSP; P00766; 1CHG.
                                                                                                                                                  MGD; MGI:1919253, 4931440B09Rik.

GO; GO:0005615; C:extracellular space; TAS.

PEAM; PP00089; TYPSAIN; 1.

PRINTS; PR00722; CTYMOTNYSIN.

SMART; SM00020; TYP SPC; 1.

PROSITE; PS50240; TRYPSIN DOM; 1.

PROSITE; PS00134; TRYPSIN HIS; UNKNOWN 1.

PROSITE; PS00135; TRYPSIN SER; 1.

Hydrolase; Percease; Serine protease.

SEQUENCE 322 AA; 36218 MW; ED55F9A199A3B491 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             288 SGMSQPDPSWPLLFFPLLWALPLLGP 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                     52.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity 52.8%
Matches 172; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       homolog.
Name=4931440B09Rik;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q9D4I3
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               226 NAQGGKDACFGDSGGPLACNKDGLWYQIGVVSWGVGCRRPNRPGVYTNISHHFEWIQKLM 285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     47 DAELGRWPWQGSLRLWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSM 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SARGRWPWQASLRIRRRHRCGGSLLSRRWVLSAAHCFQKH---YYPSEWTVQLGELTSR 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             107 PSFWSLQAYYTRYFVSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFE 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        167 NRIDCWVTGWGYIK-EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAG 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 MGARGALLLALLLARAGLGKP-GELGALQAGPGAARRPGGGGREEACGHREIHALVAGGV 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 MGARGALLLALLLARAGLRKPESQEAAPLSGP-------CGRRVITSRIVGGE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mus musculus (Mouse).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20;
                                                           MEDLINE=22722134; PubMed=12838346;
Puente X.S., Sanchez L.M., Overall C.M., Lopez-Otin C.;
"Human and mouse proteases: a comparative genomic approach.";
Nat. Rev. Genet. 4:544-558(2003).
-!- SIMILARITY: Belongs to peptidase family S1.
-!- MISCELLANEOUS: The sequence shown here is derived from an EMBL/GenBank/DDBJ third party annotation (TPA) entry.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            51.0%; Score 881; DB 2; Length 318;
53.7%; Pred. No. 2.9e-70;
tive 45; Mismatches 84; Indels 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CHAIN 21 318 testis serine protease 1. SEQUENCE 318 AA; 35078 MW; D792213630CF15C3 CRC64;
                                                                                                                                                                                                                                                                                          GO; GO:0004263; F:chymotrypsin activity; IEA.
GO; GO:0008233; F:peptidase activity; IEA.
GO; GO:0006295; F:trypsin activity; IEA.
GO; GO:0006508; P:proteolysis and peptidolysis; IEA.
InterPro; IPR001254; Peptidase_S1.
InterPro; IPR001314; Peptidase_S1A.
InterPro; IPR009003; Pept_Ser_Cys.
Pfam; PR00089; Trypsin; 1.
PRINTS; PR00722; CHYMOTRYPSIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-DR-2004 (TrEMBLrel. 26, Last annotation update)
Testis serine protease-1.
Name-4931440B99Rik; Synonyms=tessp-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hydrolase, Protease, Serine protease, Signal.
SIGNAL 1 20 Potential.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PROSITE, PS50240; TRYPSIN DOM; 1.
PROSITE; PS00134; TRYPSIN HIS; UNKNOWN_1.
PROSITE; PS00135; TRYPSIN SER; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            286 AQSGMSQPDPSWPLLFFPLLWA 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SHS-TPRPNPSQLLLLLALLWA 317
                                                                                                                                                                                                                       EMBL; BN000124; CAD67575.1;
HSSP; P08709; 1FAK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Sim:
Matches 173;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
```

ò

Š 셤 ò 셤 8 셤 092082

91 SDPSGWMVQFGQLTSMPSFWSLQAYYTRYFVSNIYLSPRYLGNSPYDIALVKLSAPVTYT

2 PCGRRNDTRSRIVGGIESMQGRWPWQASLRLKKSHRCGGSLLSRRWVLTAAHCFRKY---

φ

58

```
151 KHIQPICLQASTFEFENRTDCWVTGWGYIKED-EALPSPHTLQEVQVAIINNSMCNHLFL
                                                                                                                                                                                210 KYSFRKDIFGDMVCAGNAQGGKDACFGDSGGPLACNKDGLWYQIGVVSWGVGCGRPNRPG
                                                                                                                                                                                                                                                     270 VYTNISHHFEWIQKLMAQSGMSQPDPSWPLLFFPLLWALPLLGP 313
                                                                                                                                                                                                                                                                                                                                           RESULT 8
Q6BEA2
                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A Adachi J., Aizawa K., Akahira S., Akimura T., Arai A., Aono H.,
A Arakawa T., Bano H., Carninci P., Fukuda S., Fukudishi Y., Furuno M.,
A Hanagaki T., Hara A., Hayatsu N., Hiramoto K., Hiraoka T., Hori F.,
Imotani K., Ishii Y., Itoh M., Izawa M., Kasukawa T., Kato H.,
A Kawai J., Kojina Y., Konno H., Kouda M., Koya S., Kurihara C.,
A Matsuyama T., Miyazaki A., Nishi K., Nomura K., Numazaki R., Ohno M.,
A Okazaki Y., Okido T., Owa C., Saito H., Sato R., Sakai C., Sakai K.,
A Sano H., Sasaki D., Shibata K., Shibata Y., Shinagawa A., Shiraki T.,
A Sogabe Y., Suzuki H., Tagami M., Tagawa A., Takahashi F., Tanaka T.,
A Tejima Y., Toya T., Yammura T., Yasunishi A., Yoshida K., Yoshino M.,
Muramatsu M., Hayashizaki Y.,
L. Submitted (JUL-2000) to the EMBL/GenBank/DDBJ databases.
C -i SIMILARIYY: Belongs to peptidase family SI.
R EMBL, AKO16509; BABS0277.1; -
                                                                                                                       the RIKEN Genome Exploration Research Group Phase I & II Team; "Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs."; Nature 420:563-573 (2002).
                                                                                                                                                                                                                                 STRAIN=C57BL/6J; TISSUE=Testis;
MEDILME=20499374; DMM6d=11042159; DOI=10.1101/gr.145100;
Carninci P., Shibata Y., Hayatsu N., Sugahara Y., Shibata K., Itoh M.,
Konno H., Okazaki Y., Muramatsu M., Hayashizaki Y.;
Normalization and subtraction of cap-trapper-selected cDNAs to
prepare full-length cDNA libraries for rapid discovery of new genes.";
Genome Res. 10:1617-1630(2000).
                                                                                                                                                                                                                                                                                                                                                                                           STRAIN-CSTBL/6J; TISSUE-Testis;
MEDLINE=20530913; PubMed=11076861; DOI=10.1101/gr.152600;
Shibata K., Itoh M., Aizawa K., Nagaoka S., Sasakin N., Carninci P., Konno H., Akiyama J., Nishi K., Katsunai T., Tashiro H., Itoh M., Sumi N., Ishii Y., Nakamura S., Hazama M., Nishine T., Harada A., Yamamoto R., Matsunnoto H., Sakaguchi S., Ikegami T., Kashiwagi K., Fujiwak S., Inoue K., Togawa Y., Izawa M., Ohara E., Watshiwagi K., Foreda Y., Ishikawa T., Ozawa K., Tanaka T., Matsuura S., Kawai J., Okazaki Y., Muramatsu M., Inoue Y., Kira A., Hayashizaki Y.; RIKEN integrated sequence analysis (RISA) system-384-format Genome Res. 10:1757-1771(2000).
RIKEN FANTOM Consortium;
"Punctional annotation of a full-length mouse cDNA collection.";
Nature 409:685-690(2001).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 47.3%; Score 817; DB 2; Length 282; Best Local Similarity 55.3%; Pred. No. 1.3e-64; Matches 157; Conservative 39; Mismatches 82; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             48D89B74F750BAB4 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pfan, PP00089; Trypsin, 1.
PRINTS; PR00722; CHYMOTRYBEIN.
SWART; SMO02020; Tryp_SPc; 1.
PROSITE; PS50240; TRYPSIN DOM; 1.
PROSITE; PS0134; TRYPSIN JES; UNKNOWN_1.
PROSITE; PS01035; TRYPSIN SER; 1.
PROSITE; PS01035; TRYPSIN SER; 1.
PROSITE; PS01036; TRYPSIN SER; 1.
SRQUENCE 282 AA; 31997 WW; 48D898D74F7501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEROPS, SOI.417; -...
MGD; MGI:1118253; 4931440B08Rik.
GO; GO:005615; C:extracellular spac
InterPro; IPR001254; Peptidase_SI.
InterPro; IPR001314; Peptidase_SIA.
InterPro; IPR009033; Pept_Ser_Cys.
                                                                    SEQUENCE FROM N.A.
STRAIN=C57BL/6J; TISSUE=Testis;
The FANTOM Consortium,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                  SEQUENCE FROM N.A.
```

```
66 VCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQ----AYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

Adachi wi. Norman B., Davis J., Platigorsky J.;

Adachi wi. Norman B., Davis J., Platigorsky J.;

"Comprehensive analysis of gene expression of rat corneal epithelium.";

"Comprehensive analysis of gene expression of rat corneal epithelium.";

"I "Comprehensive analysis of gene expression of rat corneal epithelium.";

"E "Submitted (FBE-2003) to the EMBL/GenBank/DDBJ databases.

"I SIMILARITY: Belongs to peptidase family Sl.

EMBL; AB101677; BACORS to peptidase family Sl.

EMBL; AB101677; BACORS to peptidase Sl.

"O GO:0004259; F:trypsin activity; IEA.

"O, GO:0004259; F:trypsin activity; IEA.

"O, GO:0004259; F:trypsin activity; IEA.

"O, GO:000508; P:profedyses and peptidolysis; IEA.

InterPro; IPR001134; Peptidase Sl.

InterPro; IPR001314; Peptidase Sl.

"I InterPro; IPR001014; Peptidase Sl.

"I InterPro; IPR001014; Peptidase Sl.

"I RRINTS; SM00020; Tryp Spt."

"E RRINTS; SM00020; Tryp Spt."

"E RROSITE; PS00135; TRYPSIN DOM; 1.

"PROSITE; PS00135; TRYPSIN DOM; 1.

"PROSITE; PS00135; TRYPSIN SER: 1.

"Hydrolase; Protease; Serime protease.

"E RECOURTE SL.

"E RECOURTE SPS00135; TRYPSIN SM1; 1.

"E RECOURTE SPS00135; TRYPSIN SM1; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121 VSNIYLSPRYLG-NSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180 KEDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFR----KDIFGDMVCAGNAQGGKDACF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6 ALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLRLWDSH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Rattus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   35.0%; Score 605; DB 2; Length 328; 43.6%; Pred. No. 1.3e-45; ive 40; Mismatches 99; Indels
Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                   Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q6BEA2;
25-OCT-2004 (TrEMBLrel. 28, 025-OCT-2004 (TrEMBLrel. 28, 125-OCT-2004 (TrEMBLrel. 28, 125-OCT-2004)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       43.68;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches 137; Conservative
                                                                                                                                                                                 PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                            Rattus norvegicus (Rat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                               Marapsin.
                                                                                                                                                                                    Q6BEA2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
```

PCGRRVIT-SRIVGGEDAELGRWPWQGSLRLWDSHVCGVSLLSHRWALTAAHCFETYSDL 90

32

ò

δ 윱 ò 셤

```
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                            GDSGGPLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLM-----AQ 287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mittman S., Agnew W.S.;
"Organization and alternative splicing of CACNAIH.";
Submitted (JAN-201) to the EMBL/GenBank/DDBJ databases.
-I. SUBCELLULAR LOCATION: Membrane-anchored (Potential).
-I. TISSUE SPECIFICITY: Expressed in many tissues.
-I. POLYMORPHISM: There are two alleles; gamma-I and gamma-II which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryoča, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia; Eutheria; Primates, Catarrhini; Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Caughey G.H., Raymond W.W., Blount J.L., Hau L.W., Pallaoro M., Wolters P.J., Verghese G.M.;

Wolters P.J., Verghese G.M.;

Characterization of human gamma-tryptases, novel members of the chromosome 16p mast cell tryptase and prostasin gene families.";

J. Immunol. 164:6566-6575(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A. MEDLINE=99452914; PubMed=10521469; DOI=10.1074/jbc.274.43.30784; MEDLINE=99452974; PubMed=10521469; DOI=10.1074/jbc.274.43.30784; Medline Grand G., Tang Y., Feyfant B., Sali A., Li L., Li Y., Huang C., Friend D.S., Krilis S.A., Stevens R.L.; "Identification of a new member of the tryptase family of mouse a human mast cell proteases which possesses a novel CCOH-terminal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TRYG HUMAN STANDARD; PRT; 321 AA.

Q9NRR2; Q9C015; Q9NRQ8; Q9UBB2;
16-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 45, East annotation update)
25-OCT-2004 (Rel. 45, Last annotation update)
1Tryptase gamma precursor (EC 3.4.21.-) (Transmembrane tryptase).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    differ by 5 residues.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A. (VARIANTS GAMMA-1 AND GAMMA-2)
MEDLINE=20302813; PubMed=10843716;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  hydrophobic extension.";
J. Biol. Chem. 274:30784-30793(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 nterpro; IPR009003; Pept Ser Cys.
Interpro; IPR001254; PeptIdase S1.
Interpro; IPR001314; Peptidase_SIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL; AF191031; AAF76457.1; --
EMBL; AF195508; AAF76458.1; --
EMBL; AF175759; AAF03697.1; --
EMBL; AF17552; AAF03695.1; --
EMBL; AF223563; AAF948852.2; --
HSSP; P00760; 1EZX.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRINTS; PR00722; CHYMOTRYPSIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE OF 220-321 FROM N.A.
                                                                                                                                                                                                         288 SGMSQPDP-SW-PL 299
                                                                                                                                                                                                                                                                                         283 ŚQQQÓRDPRGWQPL 296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Name=TPSG1; Synonyms=TMT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Jenew; HGNC:14134; TPSG1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pfam; PF00089; Trypsin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEROPS; S01.028;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             subfamily.
                                                                                                                             223 (
                                                  236
                                                                                                                                                                                                                                                                            용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PHILAM SOUND STANKER S
                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     56 FCGGSLIAPTWVLTAAHCFST----SDISIYQVLGAL-----KLQQPGPHALYVP-- 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180 KEDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFR----KDIFGDMVCAGNAQGGKDACF 235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                66 VCGVSLLISHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQ----AYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VSNIYLSPRYLG-NSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYI 179
                                                                                        GDSGGPLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLM-----AQ 287
                                                                                                                                  170 SEQDRLPNPRILQKLAVPLIDTPKCNLLYSKDAEADIQLKTIKDDMLCAGFAEGKKDACK 229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8 ALLLIPLILIRSGL------PACGHPRMFNRWVGGEDALEGEWPWQVSIQRNGAH 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6 ALLLALLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLRLWDSH 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        45; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  proteases and protease inhibitors.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                34.6%; Score 597.5; DB 2; Length 321; 43.3%; Pred. No. 6.1e-45; ive 38; Mismatches 95; Indels 45;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           สม
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEXURALE FROM MAN AND STRAINS 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CHAIN 27 321 marapsin.
SEQUENCE 321 AA; 35053 MW; A87735DF7A52F9E1 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GO:0004263; F:chymotrypsin activity; IEA.
GO:0008223; F:peptidase activity; IEA.
GO:0004295; F:trypsin activity; IEA.
GO:0006508; P:trypsin activity; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               05-UUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hydrolase, Protease, Serine protease, Signal.
SIGNAL 1 26 Potential.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            321 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pfan; PF00089; Trypsin; 1.
PRINTS; PR00722; CHYMOTRYPSIN.
SMART; SM0020; Tryp_SPC; 1.
PROSITE; PS50240; TRYPSIN DOM; 1.
PROSITE; PS00134; TRYPSIN HIS; UNKNOWN 1.
PROSITE; PS00135; TRYPSIN HES; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Potential.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             UnterPro; IPR001254; Peptidase S1.
InterPro; IPR001314; Peptidase S1A.
InterPro; IPR009003; Pept_Ser_Gys.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BN000333; CAE48388.1; -. P00734; 1B7X.
                                                                                                                                                                                                                                                   288 SGMSQPDP-SW-PL 299
                                                                                                                                                                                                                                                                                                                                   290 SQQQQRDPRGWQPL 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity 43.35;
Matches 136; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Marapsin precursor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Name=mpn;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                        236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OGIE60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 9
QGIEGO
```

g

8

셤

ò

요

ઠ

g

```
Xenopodinae; Xenopus.
NCBI_TaxID=8364;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q6DJ90
Q6DJ90;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q6DJ30
                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         56 RIRRAHVCGGSLLSPQWVLTAAHCFSGSLNSSD---YQVHLGELEITLSPHFSTVRQII- 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               230 GKDACFGDSGGPLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSG 289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 ALGACGLILILAVPGV----SLRTLQPGCGRPQVSDAGGRIVGGHAAPAGANFWQASL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   214 PGDACQDDSGGPLVCQVNGAWVQAGIVSWGEGCGRPNRPGVYTRVPAYVNWIRRHITASG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ARGALILALLARAGLRKPESQEAAPLSGPCGRRVIT---SRIVGGEDAELGRWPWQGSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RIWDSHVCGVSILISHRWALTAAHCFETYSDLSDPSGWMVQFGQL--TSMPSFWSLQAYYT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        118 RYFVSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   178 YIKEDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFG------DMVCAGNAQG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             45; Gaps
                                                                                                                                                                         Tryptase gamma.

Tryptase gamma light chain.

Tryptase gamma heavy chain.

Tryptase gamma heavy chain.

Potential.

Charge relay system (By similarity).

Charge relay system (By similarity).

Charge relay system (By similarity).

Interchain (Potential).

By similarity.

By similarity.

By similarity.

By similarity.

Whinked (GLONAC...) (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Name=trpA;
Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
SMART; SM00020; Tryp_SPC; 1.
PROSITE; PS50240; TRYPSIN_DOM; 1.
PROSITE; PS00134; TRYPSIN_HIS; 1.
PROSITE; PS00135; TRYPSIN_SER; FALSE_NEG.
Glycoprotein; Hydrolase; Folymorphism; Serine protease; Signal; Transmembrane; Zymogen.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 1; Length 321;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    34.5%; Score 596.5; DB 1; Length 42.7%; Pred. No. 7.5e-45; tive 40; Mismatches 100; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            W -> S (in Ref. 1).
FFF7B06E3C4A962D CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                      N-linked (GlcNAc. .)
M -> V (in gamma-II).
/FTId=VAR 012097.
I -> M (in gamma-II).
/FTId=VAR 012098.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
HS transmembrane tryptase; gene name TWT; AF175522_1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 . -> I (in gamma-II).
'FTId=VAR_012100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -> T (in gamma-II).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -> F (in gamma-II)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 012099.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              012101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             321 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FTIG=VAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FTIG=VAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        290 MSQPD-PSWPL---LFFPLLWAL 308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  274 GSESGYPRLPLAGLFLPGLFLL 296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  33827 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 42.7%;
Matches 138; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                321 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    204
                                                                                                                                                                                                                                                                                                                                                    DISULFID
DISULFID
DISULFID
                                                                                                                                                                                                                                                       ACT_SITE
ACT_SITE
                                                                                                                                                                                                                                                                                              ACT_SITE
DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                            CARBOHYD
VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              112
                                                                                                                                                                                                                                                                                                                                  DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE
                                                                                                                                                                                                                                     FRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /ARIANT
                                                                                                                                                                             CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q96RZ8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 11
                                          SO STATE THE FET HE FET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SSEEPHER SS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
```

```
56 RIRRUHVCGGSLLSPQWVLTAAHCFSGSLNSSD---YQVHLGELEITLSPHFSTVRQII- 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              118 RYFVSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWG 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    178 YIKEDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFG------DMVCAGNAQG 229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           230 GKDACFGDSGGPLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSG 289
                                                                                                                                                                                                                                                                                                                                                           Higgs D.R.;

Higgs D.R.;

Sequence, structure and pathology of the fully annotated terminal 2 (T. "Sequence, atructure and pathology of the fully annotated terminal 2 (T. "Sequence, atructure and pathology of the fully annotated terminal 2 (T. "Sequence, atructure and pathology of the fully annotated terminal 2 (T. "Sequence, atructure and pathology of the short arm of human chromosome 16.";

Thum. Mol. Genet. 10:339-352(2001).

Thum. Mol. Genet. 10:339-352(2001).

Thum. Mol. Genet. 10:339-352(2001).

Thum. Mol. Genet. 10:339-352(2001).

Thum. Mol. Genet. 10:39-352(2001).

Thum. Mol. Genet. 10:39-35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 ALGACGLILILIAVPGV----SLRTLQPGCGRPQVSDAGGRIVGGHAAPAGAWPWQASL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60 RLWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQL--TSMPSFWSLQAYYT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3 ARGALLLAALLLARAGLRKPESQEAAPLSGPCGRRVIT---SRIVGGEDAELGRWPWQGSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Xenopus tropicalis (Western clawed frog) (Silurana tropicalis).
Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   45;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                34.5%; Score 595.5; DB 2; Length 321; 42.7%; Pred. No. 9.2e-45; tive 40; Mismatches 100; Indels 45
                                                                                                                                                      SEQUENCE FROM N.A.
MEDINE-21096910; PubMed=11157797; DOI=10.1093/hmg/10.4.339;
Daniels R.J., Peden J.F., Lloyd C., Horsley S.W., Clark K.,
Tufarelli C., Kearney L., Buckle V.J., Doggett N.A., Flint J
Mammalia, Butheria, Primates; Catarrhini; Hominidae; Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pfam; PF00089; Trypsin; 1.
PRINTS; PR00722; CHYMOTRYPSIN.
SMART; SM00020; Tryp SPC; 1.
PROSITE; PS50240; TRYPSIN DOM; 1.
PROSITE; PS00134; TRYPSIN HIS; UNKNOWN 1.
Hydrolase; Protease; Serine protease; Transmembrane.
SEQUENCE 321 AA; 33829 MW; FFF50895DC4FC73D CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       290 MSQPD-PSWPLL---FFPLLWAL 308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         274 GSESGYPRLPLLAGFFLPGLFLL 296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25-OCT-2004 (TrEMBLrel. 28, 25-OCT-2004 (TrEMBLrel. 28, 25-OCT-2004 (TrEMBLrel. 28, TWARTOR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity 42.73
Matches 138; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Tmprss9-prov protein.
Name=tmprss9-prov;
```

117

55

213

```
**X. Subservable Body**

**X. MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;

Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G., Schuler G.D.,

**Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

**Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

**Altschul S.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

**Batchenko L., Marusina K.K., Farmer A.A., Rubin G.M., Hong L.,

**Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheez T.E.,

**Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

**Rownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

**Brownstein M.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

**Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

**Altilon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A.,

**Pahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,

**Mhiting M., Madan A., Young A.C., Shevchenko Y., Boutfard G.G.,

**Modriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,

**Rzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,

**Jones S.J., Marra M.A.;

**Generation and initial analysis of more than 15,000 full-length human

**Proc. Natl. Acad. Sci. U.S.A., 99:16899-16903(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       364 PILSTTPAPPACGSPLVSSRIVGGTDAREGAWPWQVSLRYRGSHICGGSVIGTQWILTA 423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               136 YDIALVKISAPVTYTKHIQPICLQASTFBFBNRTDCWVTGWGYIKEDBALPSPHTLQEVQ 195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -DIALIRLISPITYTKYILDVCLPSTSNSFTDGMECWVTGWGTISLYVNLPYPKTLQDVM 532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   81 AHCFETYSDLSDPSGWMVQFGQ----LTSMPSFWSLQAYYT--RYFVSNIYLSPRYLGNSP 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                196 VAIINNSMCN---HLFLKYSFRKDIF-GDMVCAGNAQGGKDACFGDSGGPLACNKDGLWY 251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLRLWDSHVCGVSLLSHRWALTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 33.9%; Score 586; DB 2; Length 719; Best Local Similarity 43.3%; Pred. No. 1.6e-43; Matches 117; Conservative 43; Mismatches 90; Indels ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Klein S., Gerhard D.S.;
Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
-: SIMILARITY: Belongs to peptidase family Sl.
REMBL; BC075293; AAH7593.1; --
GO; GO:0004295; F:chymotrypsin activity; IEA.
R GO; GO:0006508; P:proteolysis and peptidolysis; IEA.
InterPro; IPR001234; Peptidase_Sl.
R InterPro; IPR001314; Peptidase_Sl.
R InterPro; IPR001314; Peptidase_Sl.
R InterPro; IPR009103; Peptidse_SlA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRINTS; PR00722; CHYMOTRYPSIN.
SWART; SM00020; TRYP SPC; 2.
PROSITE; PS00134; TRYPSIN DOM; 2.
PROSITE; PS00134; TRYPSIN HIS; UNKNOWN 2.
PROSITE; PS00135; TRYPSIN HIS; UNKNOWN 2.
PROSITE; PS00135; TRYPSIN SER; 2.
PROSITE; PS00135; TRYPSIN SER; 2.
SEQUENCE 719 AA; 76098 WW; 906346A21D8834C6 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OIGIVSWGEGCAIAKRPGVYTLVPAYYSWV 622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QIGVVSWGVGCGRPNRPGVYTNISHHFEWI 281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pfam; PF00089; Trypsin; 2. PRINTS; PR00722; CHYMOTRYPSIN.
[1]
SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      rissum=Whole body,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        252
  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
```

RESULT 13 QBBJR6

```
MEDLINE=20499374; PubMed=11042159; DOI=10.1101/gr.145100;
Carninci P., Shibata Y., Hayatsu N., Sugahara Y., Shibata K., Itoh M.,
Konno H., Okazaki Y., Muramatsu M., Hayashizaki Y.;
"Normalization and subtraction of cap-trapper-selected cDNAs to
prepare full-length cDNA libraries for rapid discovery of new genes.";
Genome Res. 10:1617-1630(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Adachi J., Alzawa K., Akimura T., Arakawa T., Bono H., Carninci P., Fukuda S., Furuno M., Hanaqaki T., Hara A., Hashizume W., Fukuda S., Furuno M., Hanaqaki T., Hiroka T., Hirozane T., Hori F., Imotani K., Ishi Y., Itoh M., Kagawa I., Kasukawa T., Katoh H., Kawai J., Kojima Y., Kondo S., Konno H., Kouda M., Koya S., Kurihara C., Matsuyama T., Miyazaki A., Murata M., Nakamura M., Nishi K., Nomura K., Numazaki A., Murata M., Ohsato N., Okazaki Y., Saitoh H., Saki C., Sakai K., Sakazume N., Sano H., Sasaki D., Shibata K., Shinagawa A., Shiraki T., Sogabe Y., Tagami M., Tagawa A., Takahashi F., Takaku-Akahira S., Takeda Y., Tanaka T., Tomaru A., Toya T., Yasunishi A., Muramatsu M., Hayashizaki Y.; Submitted (APR-2002) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        of
                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
STRAIN=C57BL/6J; TISSUE=Thymus;
MEDLINE=9279253; Pubmdc=10349636; DOI=10.1016/S0076-6879(99)03004-9;
Carninci P., Hayashizaki Y.;
"High-efficiency Full-length cDNA cloning.";
Meth. Enzymol. 303:19-44(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           the RIKEN Genome Exploration Research Group Phase I & II Team; "Analysis of the mouse transcriptome based on functional annotation 60,770 full-length cDNAs."; Nature 420:563-573 (2002).
                                                           01-WAR-2003 (TrEMBLrel. 23, Last sequence update)
05-UJL-2004 (TrEMBLrel. 27, Last annotation update)
Mus musculus 3 days neonate thymus chywus KIKEN full-length enriched
library, clone: A630023F11 product: similar to MARAPSIN (EC 3.4.21.-)
(Pancreasin) (Channel-activating protease 2-like protein)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRAIN=CS7BL/64) TISSUE=Thymus,
MEDLINE=20530913; PubMed=11076861; DOI=10.1101/gr.152600;
MEDLINE=20530913; PubMed=11076861; DOI=10.1101/gr.152600;
Shibata K., Itoh M., Aizawa K., Nagaoka S., Sasaki N., Carninci P., Konno H., Akiyama J., Nishi K., Kitsunai T., Tashiro H., Itoh M., Sumi N., Ishii Y., Nakamura S., Hazama M., Nishine T., Harada A., Yamamoto R., Matsunco H., Sakaguchi S., Ikegami T., Kashiwagi K., Pujiwake S., Inoue K., Togawa K., Izawa M., Chara E., Watshiki M., Yoneda Y., Ishikawa T., Ozawa K., Tanaka T., Matsunra S., Kawai J., Okazaki Y., Muramatsu M., Inoue Y., Kira A., Hayashizaki Y., Rixen A., Hayashizaki Y., Sakucing pipeline with 384 multicapillary sequencer.";
                                                                                                                                                                                                            Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "Functional annotation of a full-length mouse cDNA collection."; Nature 409:685-690(2001).
                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
STRAIN=CS7BL/6J; TISSUB=Thymus;
MEDLINE=21085660; PubMed=11217851; DOI=10.1038/35055500;
328 AA.
                                           Created)
PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
STRAIN=CS7BL/6J; TISSUE=Thymus;
The FANTOM Consortium,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Genome Res. 10:1757-1771(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRAIN=C57BL/6J; TISSUE=Thymus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRAIN=C57BL/6J; TISSUE=Thymus;
                                        (TrEMBLrel. 23,
PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RIKEN FANTOM Consortium;
                                                                                                                                                                                               Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                          NCBI_TaxID=10090;
                                        01-MAR-2003
                                                                                                                                                                          Name=Mpn;
```

```
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TISSUE=Semen;
    121 VSNIYLSPRYLG-NSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYI 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180 KEDEALPSPHTLQEVQVAIINNSMCNHLF---LKYSFR-KDIFGDMVCAGNAQGGKDACF 235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      66 VCGVSLLSHRWALTAAHCFETYSDLSDPSGWNVQFGQLTSMPSFWSLQ-----AYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6 ALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLRLWDSH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 94; Indels 28; Gaps
                                                                                                                  "Structure and activity of human pancreasin, a novel tryptic serine peptidase expressed primarily by the pancreas."; J. Biol. Chem. 5:3363-3371(2003).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Name=PRSSB;
Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GDSGGPLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQ 287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   230 GDSGGPLVCLVDQSWVQAGVISWGEGCARRNRPGVYIRVISHHKWIHQIIPE 281
                                 STRAIN=CS7BL/6; TISSUE=Bladder;
MEDLINE=22439795; PubMed=12441343; DOI=10.1074/jbc.M209353200;
                                                                              Clair J., Wolters P.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 33.9%; Score 585; DB 2; Length 328; Best Local Similarity 44.2%; Pred. No. 8.1e-44; Matches 129; Conservative 41; Mismatches 94; Indels 2
                                                                                                                                                                                                                                    Brathwaite M., Waeltz P., Schlessinger D., Nagaraja R.; Submitted (OCT-2002) to the EMBL/GenBank/DDBJ databases.

-I - SINILARITY: Belongs to peptidase family S1.
EMBL; AK080281; BAC37864.1; --
EMBL; AF542056; AA027572.1; --
HSSP; P00734; LUVS.
MEROPS; S01.074; --
MGD; MGI:2450123; Mpn.
                                                                                                                                                                                                                                                                                                                                                                                                                GO; GO:0004263; F:chymotrypsin activity; IEA.
GO; GO:0004285; F:chymotrypsin activity; IEA.
GO; GO:0004285; F:trypain activity; IEA.
GO; GO:0004285; F:trypain activity; IEA.
GO; GO:000608; P:proteclysis and peptidolysis; IEA.
InterPro; IPR001254; Peptidase_S1.
InterPro; IPR001314; Peptidase_S1A.
InterPro; IPR00003; Pept_Ser_Gys.
Pfam; PF00089; Trypsin; 1.
PRINTS; PR00722; CHYMOTRYPSIN.
SMART; SM00020; Tryp SPC; 1.
PROSITE; PS00134; TRYPSIN DOM; 1.
PROSITE; PS00134; TRYPSIN DOM; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hydrolase; Protease; Serine protease.
SEQUENCE 328 AA; 35789 MW; DCOB20F1AB3EB840 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
25-OCT-2004 (Rel. 45, Last annotation update)
Prostasin precursor (EC 3.4.21.-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       343 AA.
                                                                              Bhagwandin V.J., Hau L.W., Mallen-St
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches 129; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STANDARD;
                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                     STRAIN=129/SvJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PSS8 HUMAN
Q16651; Q9UCA3;
                                                                                                   Caughey G.H.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PSS8_HUMAN
KARAKA KA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COSCEPTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
```

```
ACTIONS PLANDED TO THE CONTRIVE OF THE THE CONTRIVE OF THE CONTRIVE OF THE THE OF THE CONTRIVE OF THE THE OF THE OF THE CONTRIVE OF THE OFTEN OF THE OFTEN OF THE OFTEN OFTEN OF THE OFTEN OFTEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               its C-terminus.
-!- TISSUB SPECIFICITY: Found in prostate, liver, salivary gland, kidney, lung, pancreas, colon, bronchus and renal proximal tubular cells. In the prostate gland it may be synthesized in epithelial cells, secreted into the ducts, and excreted into the seminal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -!- SUBCELLULAR LOCATION: Membrane-bound. Secreted after cleavage of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gland.";
J. Biol. Chem. 269:18843-18848(1994).
-!- FUNCTION: Possesses a trypsin-like cleavage specificity.
-!- SUBUNIT: Heterodimer of two chains, light and heavy, held by a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Yu J.X., Chao J., Chao J.; "Prostasin is a novel human serine proteinase from seminal fluid. Purification, tissue distribution, and localization in prostate
                                                                                                                                                                    Yu J.X., Chao L., Chao J., "Molecular cloning, tissue-specific expression, and cellular localization of human prostasin mRNA.", J. Biol. Chem. 270:13483-13489(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -!- SIMILARITY: Belongs to the peptidase S1 family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GO; GO:0005615; C:extracellular space; TAS.
FROM N.A., AND PARTIAL SEQUENCE
                                          TISSUB-Prostate;
MEDLINE-95286644; PubMed-7768952;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE=94308140; PubMed=8034638;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; L41351; AAC41759.1; -.
BMBL; J3446; AAB19071.1; -.
EMBL; BC001462; AAH01462.1; -.
PIR; A57014; A57014.
MSSP; P00760; IEXX.
MEROPS; SOL.159; -.
Genew; HGNC:9491; PRSS8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      and mouse cDNA sequences.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              H-InvDB; HIX0012982;
MIM; 600823; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE OF 45-64.
```

```
NCBI_TaxID=8355;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   200
                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ∂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    66 VCGVSLLSHRWALTAAHCFETYSDLSDPS----GWMVQFG--QLTSMPSFWSLQAYYTR 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                69 VCGGSLVSEQWVLSAAHCF-----PSEHHKEAYEVKLGAHQLDS----YSEDAKVST 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 119 YFVSNIYLSPRYL-GNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWG 1777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             178 YIKEDEALPSPHTLQEVQVAIINNSMCNHLF---LKYSFRKDIFGDMVCAGNAQGGKDAC 234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             :: :| :| || || ::| :| :| 134
175 HVAPSVSLLTPKPLQQLEVPLISRETCNCLYNIDAKPEEPHFVQEDMYCAGYVEGGKDAC 234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       235 FGDSGGPLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQ-----KLMA 286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          235 QGDSGGPLSCPVEGLWYLTGIVSWGDACGARNRPGVYTLASSYASWIQSKVTELQPRVVP 294
GO; GO:0005886; C:plasma membrane; TAS.

R GO; GO:0008236; P:serine-type peptidase activity; TAS.

InterPro; IPR001254; Peptidase_SIA.

R InterPro; IPR001314; Peptidase_SIA.

Pfam; PF00089; Trypein 1.

R PRINTS; PR00125; Trypein 1.

R PRINTS; PR00120; Tryp.SPC; 1.

R PROSTIT; SM0020; Tryp.SPC; 1.

R PROSTIT; PS00134; TRYPSIN_DM; 1.

R PROSTIT; PS00135; TRYPSIN_DM; 1.

R PROSTIT; PS00135; TRYPSIN_SER; 1.

R PROSTIT; PS00135; TRYPSIN_SER; 1.

R PROSTIT; PS00135; TRYPSIN_SER; 1.

PROSTIT; PS00135; TRYPSIN_SER; 1.

TRYPSIN 3 44 Prostasin light chain.

T GHAIN 45 32 Prostasin heavy chain.

T RANNER 320 343 Potential.

T DOMAIN 45 286 Serine protease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6 ALLIALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLRLWDSH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16 AILLYLGLLRSG-TGAEGAEA----PCG-VAPQARITGGSSAVAGGWPWQVSITYBGVH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Xenopus laevis (African clawed frog).
Sukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
Xenopodinae; Xenopus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -linked (GlcNAc. . .) (Potential)
98DD6447F5A8C1B2 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          33.5%; Score 579.5; DB 1; Length 343; 41.0%; Pred. No. 2.7e-43; Live 45; Mismatches 101; Indels 57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    287 QSGMSQPDPSW--------PLLFFPLLWALPLLGP 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |: |||| :
QTQESQPDSNLCGSHLAFSSAPAQGLLRPILFLPLGLALGLLSP 338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Serine protease.
Interchain (By similarity).
By similarity.
By similarity.
By similarity.
Charge relay system.
Charge relay system.
Charge relay system.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               N-linked
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last seq
01-MAR-2004 (TrEMBLrel. 26, Last ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Epidermis specific serine protease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         36431 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches 141; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         343 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Name=Xepsin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DISULFID
DISULFID
DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACT SITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        09PVX7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09PVX7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 15
              ACCARAGE STATE STATE SOLUTION AND ACCARAGE SOLUTION AND ACCARACE SOLUTION AND ACCARAGE SOLUTION AND ACCARAGE SOLUTION AND ACCARACE SOLUTION AND ACCARAGE SOLUTION AND ACCARAGE SOLUTION AND ACCARACE SOLUTION ACCARACE SOLUTION AND ACCARACE SOLUTION AND ACCARACE SOLUTION ACCARACE SOLUTION ACCARACE SOLUTION ACCARACE SOLUTION ACCARACE SOLUTION ACCARACE SOLUTION ACCARACE SOLUTIO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SCCOREPTER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
```

```
89 -----DLSDPSGWMVQFG--QLTSMPSFWSLQAYYTRYFVSNIYLSPRYLGNSPYDIA 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         77 TVYLGAYQLSAPDNSTVSRGVKSITKHPDF-------QYEGSSG-DIA 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             140 LVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIKEDEALPSPHTLQEVQVAII 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NNSMCNHLFLK-----YSFRKDIFGDMVCAGNAQGGKDACFGDSGGPLACNKDGLWYQ 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          177 DSSVCGTMYESSLGYIPDFSFIQE---DMVCAGYKEGRIDACQGDSGGPLVCNVNNVWLQ 233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLLFFPLLWALPLLG 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         234 LGIVSWGYGCAEPNRPGVYTKVQYYQDWLKTNVPLIVFSEEGPS-----VAPSIG 283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            33 CGRRVITSRIVGGEDABLGRWPWQGSLRLWDSHVCGVSLLSHRWALTAAHCFETYS---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         53;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 389;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         84; Indels
                            Yamada K.;
Submitted (OCT-1998) to the EMBL/GenBank/DDBJ databases.
-i- SINTLARITY: Belongs to peptidase family S1.
EMBL; ABOL869; BAA84941.1; -.
HSSP; P00760; 1EZX.
                                                                                                                                                                                   Hast; Evulos; inch.

GO; GO:0004253; F:chymotrypsin activity; IEA.

GO; GO:0004253; F:trypain activity; IEA.

GO; GO:0004255; F:trypain activity; IEA.

GO; GO:0004255; F:trypain activity; IEA.

GO; GO:0004255; F:trypain activity; IEA.

InterPro; IPR001254; Peptidase_S1.

InterPro; IPR00134; Peptidase_S1A.

InterPro; IPR00139; Pept_Ser_Gys.

Pfam; PP00089; Trypsin; 1.

RRINTS; PR00725; CHYMOTRYPSIN.

SWART; SM0020; Tryp SPc; 1.

PROSITE; PS00134; TRYPSIN HIS; UNKNOWN_1.

PROSITE; PS00134; TRYPSIN HIS; UNKNOWN_1.

PROSITE; PS00135; TRYPSIN SR; 1.

HYdrolase; Protesse; Serine protesse.

SEQUENCE 389 AA; 42375 MW; B31FB4A2F5D1F663 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   42375 MW; B31FB4A2F5D1F6E3 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 33.3%; Score 575.5; DB 2; Best Local Similarity 39.9%; Pred. No. 6.9e-43; Matches 120; Conservative 44; Mismatches 84;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Search completed: February 27, 2005, 20:18:32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Job time : 116.869 secs
SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            313 P 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               284 P 284
```

This Page Blank (uspto)

```
BC049588
AY005145
AB033822
AK176209
AX321357
AB029415
AB074516
AR253969
          AF058300
AB031330
B21853
E21854
AR142617
BD137126
BD235876
AB031331
AB031331
ABC075000
E21865
AR21852
AR21852
          1077
1071
1071
1085
1085
1081
1081
1119
1006
942
945
103
                                                                                       1123
1055
1084
1095
529
1063
1101
          10011.8
1065.8
1065.8
1065.1
1065.1
10511.2
10511.2
975.2
975.2
935.2
751
                                                                                       O
                                   ., 9416466
    GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                             Total number of hits satisfying chosen parameters:
                                                                                                  4708233 seqs, 24227607955 residues
                                                                                                                                        Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                          OM nucleic - nucleic search, using sw model
                                                                                 IDENTITY NUC Gapop 10.0 , Gapext 1.0
                                                                                                                       Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                    gb_ba: *
gb_htg: *
gb_ow: *
gb_ov: *
gb_pat: *
gb_pt: *
gb_rc: *
gb_ete: *
gb_ete: *
gb_ete: *
gb_ete: *
gb_ete: *
                                                                                                                                                                GenEmbl:*
                                                                                                                                                                                           66::
100::
110::
14::
14::
                                                                                 Scoring table:
                                                                 Perfect score:
                                                                      Sequence:
                                                                                                  Searched:
                                                                                                                                                                Database
                                     Run on:
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

					SUMMARIES	-
Decnit		*				
No.	Score	Match	Match Length DB	DB	ΩI	Description
1	1100	100.0	1100	9	AR253956	AR253956 Sequence
7	1090.6	99.1	1100	9	BD172438	BD172438 Sedreted
m	1090.6	99.1	1100	9	BD172757	BD172757 Secreted
4	1090.6	99.1	1100	9	BD173076	BD173076 Secreted
Ω.	1090.6	99.1	1100	9	BD173395	BD173395 Secreted
9	1090.6	99.1	1100	9	BD175429	BD175429 Secretory
7	1090.6	99.1	1100	9	AR410808	AR410808 Sequence
6 0	1090.6	99.1	1100	9	AR439172	AR439172 Sequence
6	1090.6	99.1	1100	9	AR473192	AR473192 Sequence
10	1090.6	99.1		9	AR527178	AR527178 Sequence
11	1090.6	99.1	1100	9	AR566211	AR566211 Sequence
12	1090.6	99.1		9	AX697665	AX697665 Sequence
13	1090.6	99.1		9	BD075578	
14	1090.6	99.1		σ	AY359034	AY359034 Homo sapi
15	1078	98.0	1094	9	AR253955	AR253955 Sequence
16	1075.6	97.8		9	E21866	E21866 Novel acido
17	1075.6	97.8		9	E21867	E21867 Novel acido
18	1075.6	97.8	1082	9	AX370459	AX370459 Sequence
19	1075.6	97.8	1082	6	AB031329	AB031329 Homo sapi

CQ714823 Sequence AX370460 Sequence AX570460 Sequence AR058300 Homo sapi AB031310 Homo sapi BZ23166 A novel m E21853 Novel acido AZ442617 Sequence BD137126 Human pro BD137126 Human pro BD137126 Human pro BD137126 Human pro BD137126 Human more BC074999 Homo sapi BC074999 Homo sapi BC074999 Homo sapi BC074999 Homo sapi BC07500 Homo sapi BC07500 Homo sapi BC049588 Mus muscu AZ191321852 Novel acido AZ191352 Sequence AZ191357 Sequence AZ131357 Sequence AZ31357 Sequence AZ31357 Sequence AZ31357 Sequence AZ31357 Sequence AZ31357 Sequence AZ31357 Sequence AZ31853969 Sequence AZ31853969 Sequence AX198283 Sequence AX198283 Sequence AX198283 Sequence		testisin serine proteinases	DB 6, Length 1100;	601601 	GGCGCCGTTATCAGGACCATGCGGCCG 120	GGACGCCGAACTCGGGCGTTGGCCGTG 180	Chargaracctagacctataraanteccacatatacaaataaacctactaaccacca 240 	CTGGGCACTCACGGCGGCGCCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG 300
1077 6 CQ714823 1077 6 AX370460 1071 9 AF058300 1071 9 AF058300 1071 9 AF058300 1085 6 E21853 1085 6 E21854 1081 6 AX142617 1081 6 BD137126 1081 6 BD137126 119 9 AB031331 1006 9 BC074999 1006 9 BC074999 1006 9 BC074999 1006 9 BC074999 1007 9 BC074999 1008 9 BC074999 1009 10 AX05145 1034 10 AX05145 1035 10 AX05145 1041 10 AB074516 1051 10 AB074516 1063 10 AR176209 529 6 AX221357 1063 10 AR059415 1101 10 AB074516 529 6 AX253969 575 6 AX208847	LIGNMENTS	rom patent US 6479274. GI:27302451 to 1100) and Hooper, J.D. s encoding human HELA2	79274-A 5 12-NOV-2002; tion/Qualifiers anism="unknown" type="genomic DNA" 100.0%; Score 1100; 100.0%; Pred. No. 6.	Vallve v; mismatcness GGAGGCCATGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	caggaagccggagtcgcàggaggc 	rcacgtcgcgcatcgtgggtggaga 	GCCTGCGCCTGTGGGATTCCCACGT) 	TCACGGCGGCGCACTGCTTTGAAAC
20 1071.8 97.4 221 1071.8 97.4 22 10071.8 97.4 22 10671.8 97.4 22 10671.8 97.4 22 24 22.2 24 2		399 W 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	Patent e tch tch	1 CGC 1 CGC 1 CGC	Oy 61 GGCTGGACT Db 61 GGCTGGACT	Oy 121 ACGGGTCAT Db 121 ACGGGTCAT	Oy 181 GCAGGGAN Db 181 GCAGGGGAN	241 CTGGGCAC

ò g ò 셤 g

ò 셤 ò

8 8 ò ద

g ò 유

ò

ద

ò

임

8

g

à ద 8

ò

g

8 셤

```
acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ሯ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              243
                     Secreted and transmembrane polypeptides and nucleic acids encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C12P21/02//C12P21/08, (C12P21/02,C12R1:19), (C12P21/02,C12R1:91), (C12P21/02,C12R1:645), C12N15/00,C12N5/00
CC Secreted and transmembrane polypeptides and nucleic CC acencoding the same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JEAN YUAN
C12N15/09, C07K14/47, C07K16/18, C07K19/00, C12N1/19, C12N1/21,
                                                                                                                                                                        띪
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   <u> ACGGGTCATCACGTCGCGCATCGTGGAGAGGACGCCGAACTCGGGCGTTGGCCGTG</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACGGGTCATCACGTCGCCATCGTGGGTGGACAGGACGCCCGAACTCGGGCGTTCGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGCGGGAGAGGAGGCCATGGGCGCGCGCGGGGCGCTGCTGCTGGCGCTGCTGCTGGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DIANE PENNICA
                                                                                                                                                                                           60/066466 1
60/066511 1
60/066840 1
                                                                                                                                                                                                       60/059121
60/059263
60/062125
60/062285
60/062816
                                                                                                                                                                                                                                                                                                                          60/063121
60/063128
60/063327
60/063541
60/063542
60/063543
60/06354
60/063735
60/064103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/064248
60/065186
60/065693
60/066364
                                                                                                                                                                          US 60/05
60/059117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 1100;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ő
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ce 1...1100 /organism='Homo sapiens (human)'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GODDARD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                 TT-SEP-1997 US 60/059112, 17-SEP-1997 US 17-SEP-1997 US 60/059113, 17-SEP-1997 US 60/059113, 17-SEP-1997 US 17-SEP-1997 US 60/059113, 17-SEP-1997 US 18-SEP-1997 US 60/052267, 17-OCT-1997 US 60/052267, 17-OCT-1997 US 24-OCT-1997 US 60/053120, 24-OCT-1997 US 60/053120, 24-OCT-1997 US 24-OCT-1997 US 60/053120, 24-OCT-1997 US 80/053120, 21-OCT-1997 US 80/053120, 21-OCT-1997 US 80/053120, 21-NOV-1997 US 80/055120, 21-NOV-1997 US 80/055120, 21-NOV-1997 US 80/056453, 25-NOV-1997 US 80/056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4;
                                                                                                                                                                                           Score 1090.6; DB 6
Pred. No. 1.5e-264;
0; Mismatches 4;
                                                       Patent: JP 2002223786-A 211 13-AUG-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .1100
/organism="Homo sapiens"
/mol type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                JP 2001385135
                                                                                            Homo sapiens (human)
JP 2002223786-A/211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 99.6%;
Matches 1093; Conservative
                                                                                                                                  13-AUG-2002
18-DEC-2001
17-SEP-1997
                                                                               GENENTECH INC
                                                                                          OS Homo sage
PN JP 20022
PD 13-AUG-2
PF 18-DEC-2
PR 17-SEP-1
17-SEP-1997 U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JIAN ZHENG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C12N5/10,
                                         game
     Yuan, J.
                                         the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                     TITLE
                                                                                              COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGCCTACCTGAGCCCATGCGGCCTGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCTTGTTTGGTAATAAACACATTCCAGTTGATGCCTTGCAGGCCATTTTTCAAAAAAA 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1100 bp DNA linear PAT 18-FEB-2003 transmembrane polypeptides and nucleic acids encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              960
                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                          540
                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          960
                                         360
                                                                             360
                                                                                                                420
                                                                                                                                                      420
                                                                                                                                                                                           480
                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                              600
                                                                                                                                                                                                                                                                                                                                                                                     600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 780
CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 1100)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTCCTGGCCGCTACTTTTTTCCCTCTTTTTGGCTCTCCCCACTCCTGGGCCGGTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA
                                                                                                                                      CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGGAATTCACC
                                                                                                                                                                                                                   CTATGACATTGCCTTGGTGAAGCTGTCTGCAGCCCTGTCACCTAAAACACATCCAGCC
                                                                                                                                                                                                                                                                                            GGTCGCCATCATAAACAACTCTATGTGCAACCACTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                               GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGTGAGCTGGGGAGTGGGCTGGGCCCCAATCGGCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCACCACTTTGAGTGGATTCCAGAAGCTGGATGGCCCAGAGTGGCATGTCCCCAGACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG
                                                                                                                  CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC
                                                                                                                                                                                             CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC
                                                                                                                                                                                                                                                                    CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                  CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                       CTGGGGGTACATCAAAGAGGATGAGCACTGCCATCTCCCCACACCCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGTGAGCTGGGGAGTGGGCTGTGGTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTCCTGGCCGCTACTCTTTTCCCTCTTCTGGGCTCTCCCCACTCCTGGGGCCGGTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 (Dases 1 to 1100)
Wood, W.I., Gurney, A.L., Goddard, A., Pennica, D., Zheng, J. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1081 AAAAAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAAAAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BD172438.1 GI:28413738
JP 2002223786-A/211.
Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BD172438
Secreted and t
the same.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1021
   241
                                                                             301
                                                                                                                                                      361
                                                                                                                                                                                           421
                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                                                                                                           601
                                                                                                                                                                                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1081
                                         301
                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 2
BD172438
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
, AUTHORS
```

Ы

ô

g

ð

g

ઠે 셤 જે

8

8 Š 셤 8 셤 g

ઠે 셤 8 g ð 셤 8

Š

윱

8 셤 ò 용 8 셤 8 셤

```
acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Clibrollo,Clibrisol), (Clibrilo,Clibrisol), (Clibrilo), (Clibrilo), Clibrisol), PC (Clibrollo), Clibrisol), (Clibrollo), Clibrollo), (Clibrollo), Clibrollo), (Clibrollo), Clibrollo), Clibrollo,Clibrollo), Clibrollo), Clibrollo), Clibrollo), Clibrollo), CC Secreted and transmembrane polypeptides and nucleic CC acids encoding the same Location/Qualifiers
FF Key Location/Qualifiers
FF source lorganism='Homo sapiens (human)'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C12P21/02//C12P21/08, (C12N1/19, C12R1:645), (C12N1/21, C12R1:19),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JEAN YUAN
C12N15/09, C07K14/47, C07K16/18, C07K19/00, C12N1/19, C12N1/21, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGCTGGACTCAGGAAGCCGGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCG 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121 ACGGGTCATCACGTCGCGCATCGTGGGTGGAGACGCCGAACTCGGGCGTTGGCCGTG 180
                                                                                                nucleic acids encoding
                                                                                                                                                                                                                                                                                            R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGCGGGAGAGAGAGGCCATGGGCGCGCGCGCGCTGCTGCTGGCGCTGCTGCTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                           Wood, W.I., Gurney, A.L., Goddard, A., Pennica, D., Zheng, J. and
                                                                                                                                                                                                                                                                                                                     Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 1100)
                                                                                                                                                                                                                                                                                                                60/059117
60/059121
60/059263
60/062125
60/062285
60/062816
60/063127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/064248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/063121
60/063128
60/063327
60/063541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/065693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/066466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 1100;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/063564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/063435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rce () Organism='Homo sapiens (human)'
Location/Qualifiers
1. 1100
/organism="Homo sapiens"
/organism="Homo sapiens"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4; Indels
                                                                         Yuan,J.
Secreted and transmembrane polypeptides and
                                                                                                                                                                                                                                                                                              PR 17-SEP-1997 US 60/059115,17-SEP-1997 US 60/059123,17-SEP-1997 US 60/059113,17-SEP-1997 US 60/059113,17-SEP-1997 US 60/059113,17-SEP-1997 US 60/059113,17-SEP-1997 US 11-SEP-1997 US 60/059119,18-SEP-1997 US 24-0CT-1997 US 60/062287,17-0CT-1997 US 24-0CT-1997 US 60/063120,24-0CT-1997 US 24-0CT-1997 US 60/063120,24-0CT-1997 US 24-0CT-1997 US 60/063120,24-0CT-1997 US 28-0CT-1997 US 60/063120,24-0CT-1997 US 28-0CT-1997 US 60/063120,24-0CT-1997 US 29-0CT-1997 US 60/063120,24-0CT-1997 US 29-0CT-1997 US 60/063120,24-0CT-1997 US 29-0CT-1997 US 60/063120,28-0CT-1997 US 29-0CT-1997 US 60/063120,28-0CT-1997 US 29-0CT-1997 US 60/063120,28-0CT-1997 US 29-0CT-1997 US 60/063120,29-0CT-1997 US 29-0CT-1997 US 60/063120,29-0CT-1997 US 29-0CT-1997 US 60/063120,29-0CT-1997 US 21-NOV-1997 US 60/063120,21-NOV-1997 US 24-NOV-1997 US 60/06451,22-NOV-1997 US MULLIAM I NOOD, AUSTIN L GURNEY, AUDREY GODD:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 6;
                                                                                                                                                                                                                                                                                                                     Score 1090.6; DB 6
Pred. No. 1.5e-264;
0; Mismatches 4;
                                                                                                                            Parcent: JP 2002238586-A 211 27-AUG-2002; GENENTECH INC
OS Homo sapiens (human)
PN JP 2002238586-A/211
PD 27-AUG-2002
PF 18-DEC-2001 JP 2001385205
PR 17-SEP-1997 US 60/059115,17-SEP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99.18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 99.6
Matches 1093; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JIAN ZHENG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C12N5/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                      REFERENCE
AUTHORS
                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                TITLE
                                                                                                                                                                                              COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BD172757 18-FEB-2003 Secreted and transmembrane polypeptides and nucleic acids encoding the same.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            961 AGCCTACCTGAGCCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCTTGTTTGGTAATAAACACATTCCAGTTGATGCCTTTGCAGGGCATTTTTCAAAAAAA 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         420
                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                                483
                                                                                                                                                                                                                                                                                                                                                                                                                   540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           900
                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGTGAGCTGGGGAGTGGGCTGTGGTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAG 843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CICCTGGCCACTACTCTTTTCCCTCTTCTCTGGGCTCTCCCACTCCTGGGGCCGGTCTG 963
                                                                    credecacreacedecedecacreerricaaaceraracreacerragrearecerecee 303
                                                                                                                                                     GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA 363
                                                                                                                                                                                                                                                                  423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTCCTGGCCGCTACTCTTTTTCCCTCTTCTCGGCCTCTCCCACTCCTGGGCCGGTCTG 960
                         CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BD172757.1 GI:28414061
JP 2002238586-A/211.
Homo sapiens (human)
Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
                                                                                                                                                                                                                                                                                                                CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCCACACCCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGTCGCCATCATAAACAACTCTATGTGCAACCACTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cesticacticacticisticacticistacia de la contractación de la contracticación de la contractión de la contracticación de la contracticación de la contractica
                                                                                                                    GTGGATGGTCCAGTTTGGCCAGCTGCCTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA
                                                                                                                                                                                                                     CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                          CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               credederacardadedargadedacrededarcrededacardacardadareda
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGACATCTTTGGAGACATGGTTTGTGCTGGCAACGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CGGTGACTCAGGTGGACCCTTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGTGAGCTGGGGAGTGGGCTGTGGTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAAAAAAAAAAAAA 1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1021
                                                                    244
                                                                                                                    301
                                                                                                                                                                    304
                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                  364
                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                124
                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                                              484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 3
BD172757
LOCUS
DEFINITION
```

ö

ᄶ

```
PI JEAN YUAN

PC C12N15/09, C07K14/47, C07K16/18, C12N1/19, C12N1/21, C12N5/10, PC C12N15/02,

PC C12N15/02,

C12P21/02, C12P21/08//(C12P21/02, C12R1:91), (C12P21/02, C12R1:19), PC (C12P21/02, C12R1:645), C12N15/00, C12N15/00, C2 Secreted and transmembrane polypeptides and nucleic CC acids encoding the
                                                                                                                                                             nucleic acids encoding
                                                                  Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 1100)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DIANE PENNICA
                                                                                                                                                                                                                                                                                                                          US

60/059117 I

60/059121 I

60/059263 I

60/062125 F

60/063127 P

60/063127 P

60/063127 P

60/063128 P

60/063128 P

60/063541 P

60/063542 P

60/063542 P

60/063543 P

60/063543 P

60/063548 P

60/065268 P

60/065368 P
                                                                                                                        Wood, W.I., Gurney, A.L., Goddard, A., Pennica, D., Zheng, J. Yuan, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/066466 1
60/066511 1
60/066840 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6; Length 1100;

    1100
/organism='Homo sapiens (human)'.

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4; Indels
                                                                                                                                                                                                                                                                                       polypeptides and
                                                                                                                                                                                      Patent: JP 2002238587-A 211 27-AUG-2002;

GENENTECH INC

S Home appiens (human)

PD 2002238587-A/211

PD 27-AUG-2002

PF 18-DEC-2001 JP 2001385248

I7-SEP-1997 US 60/059115,17-SEP-1997 US 17-SEP-1997 US 60/059115,17-SEP-1997 US 17-SEP-1997 US 60/059115,17-SEP-1997 US 17-SEP-1997 US 60/059115,17-SEP-1997 US 21-OCT-1997 US 60/053120,24-OCT-1997 US 24-OCT-1997 US 60/053120,24-OCT-1997 US 60/053120,24-OCT-1997 US 24-OCT-1997 US 60/053120,24-OCT-1997 US 60/053120,24-OCT-1997 US 28-OCT-1997 US 60/053120,24-OCT-1997 US 28-OCT-1997 US 60/053120,24-OCT-1997 US 28-OCT-1997 US 60/053120,24-OCT-1997 US 29-OCT-1997 US 60/053120,24-OCT-1997 US 29-OCT-1997 US 60/053120,21-NOV-1997 US 60/056120,21-NOV-1997 US 24-NOV-1997 US 60/056120,21-NOV-1997 US 60/056120,21-NOV-1997 US 60/056120,21-NOV-1997 US 60/056120,21-NOV-1997 US 24-NOV-1997 US 60/056120,21-NOV-1997 US 24-NOV-1997 US 60/056120,21-NOV-1997 US 24-NOV-1997 US 60/056120,21-NOV-1997 US 60/05612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 1090.6; DB 6
Pred. No. 1.5e-264;
0; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1. .1100
/organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                              Secreted and transmembrane
   GI:28414385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99.18;
                                    Homo sapiens (human)
                JP 2002238587-A/211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 99.6
Matches 1093; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24-NOV-1997 US
24-NOV-1997 US
WILLIAM I WOOD,
                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JIAN ZHENG,
                                                                                                                                                                               the same
                                                   ORGANISM
                                                                                                       REFERENCE
AUTHORS
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      961 AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           540
                                    240
                                                                      243
                                                                                                         300
                                                                                                                                          303
                                                                                                                                                                               360
                                                                                                                                                                                                   GTGGATGGTCCAGTTTGGCCAGCTGCCTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA 363
                                                                                                                                                                                                                                                   420
                                                                                                                                                                                                                                                                                       423
                                                                                                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                                                                                                                                                                 543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   963
ACGGGTCATCACGTCGCGCATCGTGGGGTGGAGACGCCCGAACTCGGGCGTTGGCCCGTG 183
                                                                                                                                                                                                                                                                                                                                                           483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGAATGGACTGTGGTATCAGATTGGAGT 783
                                                                                                                         CTGGGCACTCACGGCGCGCCACTTTGAAACCTATAGTGACCTTAGTGACCTTAGTGACCTTCGG
                                                                                                                                                                                                                                                                      CTACACCCGTTACTTCGTATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC
                                                                                                                                                                                                                                                                                                                                            CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACTACACTAAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                            CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                  CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACGGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGACATCTTTGGAGACATGGTTTGTGCTGGCAACGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGTGAGCTGGGGAGTGGCTGTGGTCGCCCCAATCGGCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTCCTGGCCGCTACTCTTTTTCCCTCTTCTCTGGGCTCTCCCACTCCTGGGGCCGGTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTCCTGGCCACTACTCTTTTTCCCTCTTCTGGGCTCTCCCACTCCTGGGGCCGTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG
                                    GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                   GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCACCCC
                                                                                                         CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG
                                                                                                                                                                             GTGGATGGTCCAGTTTGGCCAGCTGCCTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA
                                                                                                                                                                                                                                                   CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC
                                                                                                                                                                                                                                                                                                                        CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    credeceracarcaacagarcaecacreccarcreccacaccerecacaearrea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGTCGCCATCATAAACAACTCTATGTGCAACCCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGTGAGCTGGGGAGTGGGCTGTGGTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAAAAAAAAAAAAA 1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1021
 124
                                                                      184
                                                                                                         241
                                                                                                                                          244
                                                                                                                                                                             301
                                                                                                                                                                                                              304
                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                       364
                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                               484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1084
                                    181
                                                                                                                                                                                                                                                                                                                                                           124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 4
BD173076
LOCUS
DEFINITION
                                                                                                                                 유
                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
셤
                                 ò
                                                                  원
                                                                                                     ò
                                                                                                                                                                           Š
                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
```

PI

ö

Gaps

120 123

64 GGCTGGACTCAGGAAGCCGGAAGTCGCAGGAGGCGGCGCTTATCAGGACCATGCGGCCG 61 GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCG cecesea da de de contrade de co

4

셤

셤

ઠ

1100 bp DNA linear PAT 18-FEB-2003 transmembrane polypeptides and nucleic acids encoding

BD173076 Secreted and t the same. BD173076

ACCESSION

RESULT 6

8 4 8 4 8 4 8 4 8 4 8 8 8 8 8 8 8

```
PAT 18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               543
                                                                                                                                                                                                                                                         Ashkenazi, A., Botstein, D., Desnoyers, L., Eaton, D.L., Ferrara, N., Filvaroff, E., Fong, S., Gao, W.-Q., Gerber, H., Gerritsen, M.B., Goddard, A., Godowski, P.J., Grimaldi, J.C., Gurney, A.L., Hillan, K.J. Kljavin, I.J., Mather, J.P., Pan, J., Paoni, N.F., Roy, M.A., Stewart, T.A., Tumas, D., Williams, P.M. and Wood, W.I. Secreted and transmembrane polypeptides and nucleic acids encoding
                                                                                                                                                                                                                                                                                                                                                            encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCTTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGCCCCTTATCAGGACCATGCGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GIGGAIGGICCAGITIGGCCAGCIGACITCCAIGCCAICCITCIGGAGCCIGCAGGCCIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CIGGGGGTACATCAAAGAGGATGAGGCACTGCCCATCTCCCCACACCCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCCGAACTCGGGCGTTGGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    124 ACGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCCGAACTCGGGCGTTGGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTACACCCGTTACTTCGTATCGAATATCTGAGCCCTCGCTACCTGGGGAATTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCGTTATCAGGACCATGCGGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ecadeceaeccrececcreredearreceaecrareceaercaeccrecreceaeccaece
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGGATGGTCCAGTTTGGCCAGCTGCTTCCATGCCTTCTGGAGCCTGCAGGCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGGAATTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTATGACATTGCCTTGGTGAAGCTGTCTGCACTGTGTCACCTACACTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CATCIGITCICCAGGCCTCCACATITGAGITITGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 1100;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 1090.6; DB 6
Pred. No. 1.5e-264;
0; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                       Patent: US 6635468-A 256 21-OCT-2003;
Location/Qualifiers
1. 1100
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                          AR410808 1100 bp DI
Sequence 256 from patent US 6635468.
AR410808
AR410808.1 GI:40162308
                                               1084 AAAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 99.6%;
Matches 1093; Conservative 0
                                                                                                                                                                                                                                             Unclassified.
                                                                                                                                                                                                                                                                                                                                                                          the same
                                                                                                                                                                                                             Unknown.
                  1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                              RESULT 7
AR410808
LOCUS
DEFINITION
                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                              ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORIGIN
                8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ជ្ជ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8 &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCTTGTTTGGTAATAAACACATTCCAGTTGATGCCTTGCAGGCCATTTTTCAAAAAAA 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1024 TCTIGTTTGGTAATAAACACATTCCAGTTGATGCCTTGCAGGGCATTCTTCAAAAAAA 1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1020
ö
                                                                                                                                                            900
                                                                                              GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCG 120
                                                                                                                              123
                                                                                                                                                                                            183
                                                                                                                                                                                                                                                            243
                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                           244 CTGGGCACTCACGGCGGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG 303
                                                                                                                                                                                                                                                                                                                                                          360
                                                                                                                                                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                                                                                                                                                                                         CTACACCCGTTACTTCGTATCGAATATCTGAGCCCTCGCTACCTGGGGGAATTCACC 423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG 543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   960
                                                                                                                                                                                                                          GCAGGGGAGCCTGCCGCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTCCTGGCCACTACTCTTTTTCCCTCTTCTCTGGGCTCTCCCACTCCTGGGGCCGGTCTG 963
                                 9
                                                              63
                                                                                                                GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                    CGCGGGAGAGGAGGCCATGGGGCGCGCGCGGGGCGCTGCTGCTGGCGCGCTGCTGGCTCG
                                                                                                                                                                                          124 ACGGGTCATCACGTCGCGATCGTGGGTGGAGGACGCCGAACTCGGGCGTTGGCCGTG
                                                                                                                                                                                                                                                          184 GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                                                                                                                                                                          CTGGGCACTCACGGCGCGCCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCCACACCCTCCAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGACATCTTTGGAGACATGGTTTGTGCTGGCAACGCCCAAGGCGGGAAGGATGCCTTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGTGAGCTGGGGAGTGGGCTGTCGGCCCCAATCGGCCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGCGGGAGAGGCCCATGGGCGCGCGCGCGCGCTGCTGCTGCTGCTGCTGCTGGCTCG
                                                                                                                                                                                                                                                                                                                                                         GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                         CTACACCCGTTACTTCGTATCGAATATCTGAGCCCTCGCTACCTGGGGAATTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACACAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGAGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTĞCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGAATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGTGAGCTGGGGAGTGGGCTGTGGCTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CICCIGGCCGCTACICITITICCCICITCTCTGGGCTCTCCCACICCTGGGGCCGGTCTG
Gaps
 ö
Indels
 4;
Mismatches
ö
Conservative
Matches 1093;
                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1021
                                                                                                                            64
                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                         304
                                                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                                                         364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   781
```

Q

δ

g

8

8 6 8

8

셤

ò

셤

8

셤

ઠે

8 4 8 6 8

g

à

ò 셤 8 셤 8 g ò g Š 요 g ò 요 5 G

ò

```
1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1023
                                                                                                 240
                                                                                                                                                      300
                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                     543
                                                                                                                                                                                                                                                                                                                                                                                                                                  900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           963
               123
                                                                      183
                                                                                                                            243
                                                                                                                                                                                 303
                                                                                                                                                                                                                                      363
                                                                                                                                                                                                                                                                                          423
                                                                                                                                                                                                                                                                                                                                                  483
                                                                                                                                                                                                                                                                                                                                                                                                                                                            603
64 GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCG
                                                                                                                                                                                                                                                                                                                                                                                           CATCIGICICACGCCTCCACATITGAGTITGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTCCTGGCCACTACTCTTTTTCCCTCTTCTGGGCTCTCCCACTCCTGGGGCCGTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    124 ACGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCGAACTCGGGCGTTGGCCGTG
                                                                                                                                                                       CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG
                                                                                                                                                                                                                            CTACACCCGTTACTTCGTATCGAATATCTGAGCCCTCGCTACCTGGGGAATTCACC
                                                                                                                                                                                                                                                                                                                                      CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCCACCCTCCAGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGACATCTTTGGAGACATGGTTTGTGCTGGCAACGCCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCACCACTTTGAGTGGATCCAGAAGCTGATGGCCCAGAGTGGCATGTCCCCAGCCGACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CICCIGGCGCCIACICITITICCCICITCICIGGGCTCICCCACICCIGGGGCCGGTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGCCTACCTGAGCCCATGCAGCCTGGGGCCCACTGCCAAGTCAGGCCCTGGTTCTCTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181 GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                              184 GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                                         CTGGGCACTCACGGCGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG
                                                                                                                                                                                                            GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA
                                                                                                                                                                                                                                                                                                                                                                           CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGTCGCCATCATAAACAACTCTATGTGCAACCCCCTCTTCCTCAAGTACAGTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGGTGACTCAGGTGGACCCTTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGTGAGCTGGGGAGTGGGCTGTGGTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCACCACTTTGAGTGGATCCAGAAGCTGATGGCCCAGAGTGGCATGTCCCAGGCCAGACCC
                                            ACGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCGAACTCGGGCGTTGGCCGTG
                                                                                                                                                                                                                                                                   CTACACCCGTTACTTCGTATCGAATATCTGAGCCCTCGCTACCTGGGGAATTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                        CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAAAAAAAAAAAAAA 1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                364
                                                                                                                                                                                                                                                                                                                                                                                                                                                             544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1081
                                            121
                                                                                                                                                                                                                                                                                                                                                                                                       484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1084
                                                                                                                                                         241
                                                                                                                                                                                   244
                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                  424
                                                                                                                                                                                                                                                                                                                                                                                                                                   541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   901
                                                                                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT
                                                                                                                      요
                                                                                                                                                                                                                                  ద
                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                             유
                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                  8 6 6 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      д
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       $ A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                      셤
                                                                                           ò
                                                                                                                                                       8 · 8
                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                           Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unclassified.

[ Dases I to 1100)

Ashkenazi, J. Batchi, D., Desnoyers, L., Eaton, D.L., Ferrara, N.,
Ashkenazi, Fong, S., Gao, W.-O., Gerber, H., Gerriteen, M.E.,
Goddard, A., Godowski, P. J., Grimaldi, J.C., Gurney, A.L., Hillan, K.J.,
Kljavin, I.J., Mather, J.P., Pan, J., Paoni, N.F., Roy, M.A.,
Stewart, T.A., Tunas, D., Williams, P.M. and Wood, W.I.
Secreted and transmembrane polypeptides and nucleic acids ehcoding
                                                                                                                                                                                                                                                                                                                                                                1020
                                                                                                                                                                                                                                                                                                                                                                                                                      1083
                                                                                                                                                                                                                                                                                                                                                                                           1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20-FEB-2004
                                                                                                                                                                                                                                                                                                         960
                                99
                                                          663
                                                                                    720
                                                                                                              723
                                                                                                                                         780
                                                                                                                                                                    783
                                                                                                                                                                                                 840
                                                                                                                                                                                                                           843
                                                                                                                                                                                                                                                      900
                                                                                                                                                                                                                                                                                 903
                                                                                                                                                                                                                                                                                                                                     963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGCCGCCGTTATCAGGACCATGCGGCCG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          63
  CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCTCCAGGAAGTTCA
                                                                                                  GGACATCTTTGGAGACATGGTTTGTGCTGGCAGCACCCAAGGCGGGGAAGGATGCCTGCTT
                                                                                                                                                         CGTGAGCTGGGGAGTGGGCTGTGGTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                           cercadecresegacresecrereseccearcesecceserereracacaararese
                                                                                                                                                                                                                                                      CCACCACTTTGAGTGGATCCAGAAGCTGATGGCCCAGAGTGGCATGTCCCAGCAGCCAGACCC
                                                                                                                                                                                                                                                                                                           crecreececratririnecerericineecerereceaerere
                                                                                                                                                                                                                                                                                                                           CTCCTGGCCACTACTCTTTTTCCCTCTTCTCTGGGCTCTCCCCACTCCTGGGGCCGGTCTG
                                                                                                                                                                                                                                                                                                                                                                 AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTGTG
                                                                                                                                                                                                                                                                                                                                                                                        cacadadadadaccardadacacacadadacacaracracracracacacracracarca
                              GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                          GGTCGCCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                            CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT
                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           6; Length 1100;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99.1%; Score 1090.6; DB 6;
llarity 99.6%; Pred. No. 1.5e-264;
Conservative 0; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Patent: US 6664376-A 256 16-DEC-2003;
Location/Qualifiers
1. .1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AR439172 1100 bp D
Sequence 256 from patent US 6664376.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAAAAAAAAAAAAA 1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AR439172.1 GI:42665021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 1093; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AR439172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  the
     544
                                                          604
                                                                                                               664
                                                                                                                                          721
                                                                                                                                                                    724
                                                                                                                                                                                               781
                                                                                                                                                                                                                           784
                                                                                                                                                                                                                                                      841
                                                                                                                                                                                                                                                                                 844
                                                                                                                                                                                                                                                                                                           901
                                                                                                                                                                                                                                                                                                                                      904
                                                                                                                                                                                                                                                                                                                                                                 961
                                                                                                                                                                                                                                                                                                                                                                                           964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                               601
                                                                                     661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 8
AR439172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORIGIN
```

셤 8

ઠે

Qy 721 CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT 780 Db 724 CGGTGACTCAGGTGGCCTGTGACTGACTGGGTATCAGATTGGAGT 783 Cy 781 CGTGAGCTGGGGGGCTGTGGCCCCATCGGCCCGGTGTCTACACCCAATATCAG 840 Pa 784 CGTGAGCTGGGGAGTGGCCTGTGGCCCCAATCGGCCCGGTGTCTACACCCAATATCAG 840 Cy 841 CCACCACTTTGAGTGGATCCAGATCGGCCCAGTGTCTCACACCCAATATCAG 843 Qy 841 CCACCACTTTGAGTGGATCCAGAGTGCCCAGAGTGCCCAGACCC 900 Db 844 CCACCACTTTGAGTGGATCCAGAGTGCCCAGAGTGCCCAGACCC 903 Qy 90 CTCCTGGCCGATCTCTTTTTCCCTCTTTTTCCTGGGCTCTCCCAGGCCGTTG 960 Db 904 CTCCTGGCCCATGCTCTTTTTTCCTTTTTTCCTTCTGGGCTCTCCTGGGGCCGGTCTG 963 Qy 901 CTCCTGGCCCATGCTCTTTTTTTCCTCTTCTCTGGGCCTCCTGGGTCTC 963 Qy 902 CTCCTGGCCCATGCTCTTTTTTTCCTCTTCTTCTCTGGGCCCTTTTGGGGCCCTTTTTT	Oy 1021 TCTTGTTTGGTAATAACACATTCCAGTTGATGCCTTGCAGGGCATTTTTCAAAAAAA 1080		REPRENCE 1 (bases I to 1100) AUTHORS Ashkenazi,A., Botstein,D., Desnoyers,L., Eaton,D.L., Ferrara,N., Filvaroff,E., Fongy,S., Gao,WQ., Gerber,H., Gerritsen,M.E., Goddard,A., Godowski,P.J., Grimaldi,J.C., Gurney,A.L., Hillan,K.J., Kljavin,I.J., Mather,J.P., Pand,J., Paoni,N.P., Roy,M.A., Stewart,T.A., Tunas,D., Williams,P.M. and Wood,W.I. Secreted and transmembrane polypeptides and nucleic acids encoding the same JOURNAL Patent: US 6723535-A 256 20-APR-2004; FEATURES I. Location/Qualifiers Source 1.100	Query Match 99.1%; Score 1090.6; DB 6; Length 1100; Best Local Similarity 99.6%; Pred. No. 1.5e-264; At local Similarity 0; Matches 1093; Conservative 0; Mismatches 4; Indels 0; Gaps 0; Qy 1 CGCGGGAGAGAGGCCATGGGCGCGCGGGGCGCTGCTGCTGCTGCTGCTGCTGCTGC
AR473192 LOCUS LOCUS DEFINITION Sequence 256 from patent US 6686451. AR73192 AR473192 AR473192 AR473192 AR473192 AR473192 AR473192 AR473192 AR473192 AR473192 Unknown. ORGANISM Unclassified. I (basss 1 to 1100) AUTHORS AUTH	Ouery Match Query Match Query Match Query Match Best Local Similarity 99.6%; Pred. No. 1.5e-264; Indels Matches 1093; Conservative 0; Mismatches 4; Indels 0; Gaps 0; Matches 1091; Conservative 0; Mismatches 4; Indels 0; Gaps 0; QY 1 GGGGAGAGAGAGAGGCCATGGGGGGGGGGGGGGTGCTGCTGCTGGTGGTGGTGGTGGT	61 GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGCCCGTTATCAGGACCATGCGGCCG [184 GCAGGGGACCTGCGGCTTGTGGGATTCCCACGTATGCGGAGTGAGCCTCAGCCACCG 243	

us-10-040-647-5.rge

AUTHORS Desnoyers, L., Goddard, A., Godowski, P.J., Gurney, A.L. and Wood, W.I. TITLE Secreted and transmembrane polypeptides and nucleic acids encoding JOURNAL Patent: US 6767995-A 256 27-JUL-2004; FEATURES Location/Qualifiers Source //organism="unknown" ORIGIN	Query Match 99.1%; Score 1090.6; DB 6; Length 1100; Best Local Similarity 99.6%; Pred. No. 1.5e-264; Matches 1093; Conservative 0; Mismatches 4; Indels 0; Gaps 0;	CGCGGGAGAGGAGGCCATGGGCGCGCGGGGGCGCTGCTGCTGCTGCTGCTGCTGCTG	GGCTGGACTCAGGAGCGGAGTCGCAGGAGCGGGCGCGCTATATCAGGACCATGCGGCCG	121 ACGGGTCATCACGTCGCGCATCGTCGGAGGACGCCGAACTCGGGCGTTGGCCGTG	181	241 CTGGGCACTCACGGGGGGGCACTGCTTTGAAACCTTAGTGACCTTAGTGATCCTCGGGCACTACGGGCGCGCACTGCTTTGAAACCTTAGTGACTTAGTGATCCTCGGCACGCGGCGGCGCCACTGCTTTGAAACCTTATGAACTTAGTGACTTAGTGACTTCGGCAACTTAGTGAACTTAGTGACTTAGTGAACTTCGCGCACTCGCGACTTAGTGAACTTAGTGAACTTCGCTCCGG	301 GTGGATGGTTTTGGCCGGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA 304 GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGAGGCCTA	361	421 CTATGACATTGCCTTGGGGAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC 424 CTATGACATTGCCTTGGAGCTGTTCTGCACCTGTCACCTACACTAAACAATCCAGCC	481 CATCTCTCCCAGGCCTCCATTTGAGTTTTGAGAACGGGACAGACTGCTGGGTGACTGG 484 CATCTGTCTCCAGGCCTCCAATTTGAGATTTTGAGAACGGACAGACTGCTGGGTGACTGGGTGAACTGGGTGAACGGGGTGAACTGAACTGAACTGGAACTGGAACTGGAACTGGAACTGGAACTGGAACTGGAACTGGAACTGGAACTGAACTGAACTGGAACTGGAACTGGAACTGGAACTGGAACTAACT	541 CTGGGGGTACAAGAGGATGAGGCACTGCCATCTCCCCACACCCTCCAGGAAGTTCA 544 CTGGGGGTACAACAACAATGCCATCTCCCCACACCCTCCAGGAAGTTCA 544 CTGGGGGTACAACAACAATGCCAACTCCCCACACCCCCACACACCCCCACACACA	601 GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA 604 GGTCGCCATCATAAACAAACTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA	661 GGACATCTTTGGAGCATCGCTGGCAATGCCCAAGGCGGAAGGATGCCTGCTT	Oy 721 CGGTGACTCAGGTGACCCTTGGCCTGTAACAAGGACTGTGGTATCAGATTGGAGT 780	Oy 781 CGTGAGCTGGGAGTGGGCTGTGGCCCAATCGGCCCGGTGTTACACCAATATCAG 840	Oy 841 CCACCACTTGAGTGGATCCAGAAGCTGATGGCCAGAGTGGCATGTCCCAGCCAG
Oy 241 CTGGGCACTCACGGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG 300	OY 361 CTACACCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC 420	OY 421 CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTACACTAAACACATCCAGCC 480	OY 481 CAICTGTCTCCAGGCCTCCACAITTGAGTTTGAGACGGACAGACTGCTGGGGGGCTGG 540	Oy 541 CTGGGGGTACATCAAAGAGATGAGGCACTGCCATCCCCCACCACCTCCAGGAAGTTCA 600 Db 544 CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCTCCAGGAAGTTCA 603	Qy 601 GGTGGCGATCATAAACAACTGTAGGAGCCGCCTTTCCTCAAGTACAGTTCGGCAA 660 	Qy 661 GGACATCTTTGGAGACAFGGTTTGTGCTGGCAATGCCCAAGGAGGAAGGATGCCTGCTT 720 	Qy 721 CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGATTGGAGT 780	OY 781 CGTGAGCTGGGGCTGTGGCCCAATCGGCCCGGTGTCTACACAATATCAG 840 Db 784 CGTGAGCTGGGGAGTGGGCTGTCGGCCCAATGCGGCCGGTGTCTACACCAATATCAG 843	QY 841 CCACCACTTTGAGTGGATCCAGAAGCTGATGGCCCAGAGTGGCATGTCCCAGCCAG	OY 901 CTCCTGGCCGCTACTCTTTTCCCTCTTCTCGGCCTCCCCCACTCCTGGGGCCGGTCTG 960 Db 904 CTCCTGGCCACTACTCTTTTCCCTCTTCTCTGGGCTCTCCCACTCCTGGGGCCGGTCTG 963	Qy 961 AGCCTACCTGAGCCTGCGGGCCACTGCCAAGTCAGGCCTGGTTCTCTTCTG 1020 Db 964 AGCCTACCTGAGCCCATGCAGGCCACTGCCACTGCCAGGTCATCTCTTCTG 1023	OY 1021 TCTTGTTTGGTAATAAACACATTCCAGTTGATGCCTTGCAGGGCATTTTTCAAAAAAA 1080 Db 1024 TCTTGTTTGGTAATAAACACATTCCAGTTGATGCCTTGCAGGGCATTCTTCAAAAAAA 1083	Oy 1081 AAAAAAAAAAAAA 1097 	AR566211	TION Sequence 256 ION AR566211 N AR566211.1 G DS	SOURCE Unknown. ORGANISM Unknown. Unclassiffied. (Inclassiffied. (FEFERENCE 1 (bases 1 to 1100)

361 CTACACCOGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC 420 [00	E SE S
8 6 8 6 8 6	8 4 8 4 8 4	OY O	REFEREN AUTHO TITLE JOURN
QY 901 CTCCTGGCCGCTACTCTTTTTCCCTCTTCTCGGGCTCTCCGACTCCTGGGGCCGGTTG 960 Db 904 CTCCTGGCCACTACTTTTTCCCTCTTCTGGGCTCTCCCACTCCTGGGGCCGGTCTG 961 QY 961 AGCCTACCTGGCGCCTGGGGGCCACTGCCAGTCAGTCTCTCTTCTG 1020 Db 964 AGCCTACCTGGCGCTGGCGCCTGCCAGTCGAGTCTCTTCTTCTG 1020 OY 1021 TCTTGTTTGGTAATAAACACATTCCAGTTGATGCCTTGCAGGCCTTTTTCAAAAAAAA	QY 1081 AAAAAAAAAAAAAAAAAA 1097 Db 1084 AAAAAAAAAAAAAA 1100 RESULT 12 AX697665 LOCUS AX697665 LOCUS AX697665 LOCUS AX697665 ACCESSION AX697665 URRSION AX697665 ACCESSION AX697665 ACCESSION AX697665	SOURCE ORGANISM Homo sapiens (human) ORGANISM Homo sapiens (human) Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. AUTHORS AUTHORS ANAKenazi,A.J.; Botstein,D.; Desnoyers,L.; Eaton,D.L.; Ferrara,N.; Flivaroff,E.; Fong,S.; Gao,M.Q.; Gerber,H.; Geritenen,M.E.; Coddard,A.; Godowski,P.J.; Pan,J.; Pan,J.; Pan,J.; Catney,A.L.; Hillan,K.J.; Screeted and transmembrane ploypeptides and mucleic acids encoding the same JOURNAL Patent: WO 0104311-A 256 18-JAN-2001; Genentech Inc. (US) FRATURES Location/Qualifiers Source Vorganism="Homo sapiens"	Oy 181 GCAGGGGAGCCTGCGCTGTGGGATTCCCACGTATGCGGAGTGAGCCTCAGCCACCCCCG 240 INTERPRETATION OF A CONTRACTAGAGCTTAGAGCTCAGCCACCC 241 CTGGGCACTCACGGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG 300 244 CTGGGCACTCACGGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCC

363

423 480 483 540

543

600

603

999 663 720

```
1100 bp mRNA linear PRI 03-OCT-2003
Homo sapiens clone DNA42551 PRSS21 (UNQ266) mRNA, complete cds.
AY359034
PLI CDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCTTGTTTGGTAATAAACACATTCCAGTTGATGCCTTGCAGGGCATTTTTCAAAAAAA 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (Dases 1 to 110). 1 (Dases 1 to 110). Char, H.F. Gurney, A.L., Abaya, E., Baker, K., Baldwin, D., Brush, J., Chen, J., Chow, B., Chui, C., Crowley, C., Currell, B., Deuel, B., Dowd, P., Eaton, D., Poster, J., Grimandi, C., Gu, Q., Hass, P.E., Heldens, S., Huang, A., Kim, H.S., Klimowski, L., Jin, Y., Johnson, S., Lee, J., Lewis, L., Liao, D., Mark, M., Robbie, E., Sanchez, C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     904 CTCCTGGCCACTACTCTTTTTCCCTCTTCTGGGCTCTCCCCACTCCTGGGGCCGGTCTG 963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       844 CCACCACTITICACTIGGATCCAGAAGCTGATGGCCCAGAGTGGCATGTCCCAGGCAGACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1024 TCTTGTTTGGTAATAAACACATTCCAGTTGATGCCTTGCAGGGCATTCTTCAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CICCIGGCCGCIACITITICCCICITICICIGGCCICICCCACICCIGGGCCGGICIG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCACCACTTTGAGTGGATCCAGAAGCTGATGGCCCAGAGTGGCATGTCCCAGGCCAGACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGTGAGCTGGGGGGGGGGGGCCCAATCGGCCCGGTGTCTACACCCAATATCAG
CATCHGTCTCCAGGCCTCCACATTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                  CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCCCCCGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                        604 GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTACACCCGTTACTTCGTATCTATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC
                                                                                                        CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCCACCTAAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAAAAAAAAAAAAA 1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FLI CDNA.
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        901
                                     304
                                                                                                                                         364
                                                                                                                                                                                                                                            424
                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                  484
                                                                                                                                                                                                                                                                                                                                                                                                   541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 781
                                                                                      361
                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 14
AY359034
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     윉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                        음
                                                                                      ò
                                                                                                                              - 원
                                                                                                                                                                                            à
                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                              요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JEAN YUAN
C12N15/09,C07K14/47,C07K14/705,C07K16/18,C07K16/28,C07K19/00,
C12N1/19,
C12N1/21,C12N5/10,C12P21/02,C12P21/08,C12Q1/02//(C12P21/08, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GIGGAIGGICCAGITIGGCCAGCIGACIICCAIGCCAICCIICTGGAGCCIGCAGGCCIA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ပ္ပ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GODDARD, DIANE PENICA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCAGGGGAGCCTGCGCATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG
                                                                                           PR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  nucleic acid
                                                                                      0S 60/05918.
60/059117 PR 60/059121 PR 60/062125 PR 60/062285 PR 60/0623121 PR 60/063121 PR 60/063131 PR 60/06410 PR 60/06410 PR 60/066120 PR 60/066120 PR 60/066120 PR 60/066131 PR 60/066131 PR 60/066131 PR 60/06413 PR 60/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6; Length 1100;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .1100 /organism='Homo sapiens (human)'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C12N15/00,C12NS/00
Secretory and transmembrane polypeptide and
encoding the same
                                                                                           S
                                                                                                                17-SEP-1997 US 60/05912,17-SEP-1997 US 17-SEP-1997 US 60/059119,18-SEP-1997 US 60/059119,18-SEP-1997 US 18-SEP-1997 US 60/059119,18-SEP-1997 US 18-SEP-1997 US 60/05926,15-077-1997 US 21-077-1997 US 60/063281,24-077-1997 US 24-077-1997 US 60/063120,24-077-1997 US 24-077-1997 US 60/063120,24-077-1997 US 28-077-1997 US 60/063120,24-077-1997 US 28-077-1997 US 60/063549,28-077-1997 US 28-077-1997 US 60/063549,28-077-1997 US 29-077-1997 US 60/063549,28-077-1997 US 29-077-1997 US 60/063549,28-077-1997 US 29-077-1997 US 60/063549,28-077-1997 US 29-077-1997 US 60/06354,28-077-1997 US 60/063120,29-077-1997 US 60/063120,29-077-1997 US 60/064218,07-NOV-1997 US 21-NOV-1997 US 60/065364,24-NOV-1997 US 60/065364,24-NOV-1997 US 21-NOV-1997 US 60/066364,24-NOV-1997 US 21-NOV-1997 US 60/066364,24-NOV-1997 US 80/066811,24-NOV-1997 US 80/066364,24-NOV-1997 US 80/066811,24-NOV-1997 US 80/066811,24-NOV-19
                                                                                                           60/059112,17-ESP-1997 US

60/059113,17-ESP-1997 US

60/052281,13-ESP-1997 US

60/062287,17-OCT-1997 US

60/063282,24-OCT-1997 US

60/063120,24-OCT-1997 US

60/063120,24-OCT-1997 US

60/063129,24-OCT-1997 US

60/06354,28-OCT-1997 US

60/06354,28-OCT-1997 US

60/06354,28-OCT-1997 US

60/06354,28-OCT-1997 US

60/063125,29-OCT-1997 US

60/063134,29-OCT-1997 US

60/064164,24-NOV-1997 US

60/065693,21-NOV-1997 US

60/065693,21-NOV-1997 US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 1090.6; DB 6;
Pred. No. 1.5e-264;
0; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .1100
/organism="Homo saplens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                     2001516580-A/211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 99.6%;
Matches 1093; Conservative 0
                  JP 2001516580
02-OCT-2001
16-SEP-1998 J
17-SEP-1997 U
                  PN JP 20015
PD 02-0CT-2
PF 16-SEP-1
PR 17-SEP-1997 U
17-SEP-1997 U
17-SEP-1997 U
18-SEP-1997 U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CHEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C12R1:91)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JEAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ខ្លួម
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
```

셤

8

ò

g

ð

ò

g

g

g ò

ò

1020 1023

900

840 843

780 783

723

903

```
AGCCTACCTGAGCCCATGCAGCCTGGGCCACTGCCAAGTCAGGCCCTGGTTCTTCTG 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 20-DEC-2002
                                                                    900
                                                                                                  603
                                                                                                                                 99
                                                                                                                                                                                               720
                                                                                                                                                                                                                                                            780
                                                                                                                                                               663
                                                                                                                                                                                                                            723
                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTCCTGGCCGCTACTCTTTTTCCCTCTTCTGGGGCTCTCCCACTCCTGGGGCCGGTCTG 960
                                                                                                                                                                                                                                                                                          783
                                                                                                                                                                                                                                                                                                                         CGTGAGCTGGGGAGTGGGCTGGGCCCCAATCGGCCCCGGTGTCTACACCAATATCAG 840
                                                                                                                                                                                                                                                                                                                                                         843
                                                                                                                                                                                                                                                                                                                                                                                         903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          or testisin serine proteinases
 GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTCCTGGCCACTACTCTTTTTCCCTCTTCTCTGGGCTCTCCCACTCTCTGGGGCCGGTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGACATCTTTGGAGACATGGTTTGTGCTGGCAACGCCCCAAGGGGGGAAGGATGCCTGCTT
                                                                                                GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                            CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                             CGGTGACTCAGGTGGACCCTTGGACTGTAACAATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                            CGTGAGCTGGGGAGTGGGCTGTGGTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 1094;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98.0%; Score 1078; DB 6; 99.5%; Pred. No. 2.3e-261; ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 (bases 1 to 1094)
Antalis,T.M. and Hooper,J.D.
DNA molecules encoding human HELA2 of Patent: US 6479274-A 3 12-NOV-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AR253955 1094 bp
Sequence 3 from patent US 6479274.
AR253955 GI:27302450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
1. .1094
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1084 AAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAAAAAAAAAAAAA 1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 99.5
Matches 1094; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1081
                                  484
                                                                                                544
                                                                                                                               601
                                                                                                                                                               604
                                                                                                                                                                                               661
                                                                                                                                                                                                                            664
                                                                                                                                                                                                                                                            721
                                                                                                                                                                                                                                                                                          724
                                                                                                                                                                                                                                                                                                                        781
                                                                                                                                                                                                                                                                                                                                                       784
                                                                                                                                                                                                                                                                                                                                                                                          841
                                                                                                                                                                                                                                                                                                                                                                                                                      844
                                                                                                                                                                                                                                                                                                                                                                                                                                                      901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1021
    481
                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AR253955
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORIGIN
                            유 상 R
                                                                                                                    8 8 8 8 8 8
                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                       ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ें
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                 /product="PRS221"
/product="PRS221"
/protein_id="AAQ89393.1"
/protein_id="AAQ89393.1"
/protein_id="AAQ89393.1"
/protein_id="AAQ89393.1"
/protein_id="G137183186"
/translation="MARGALLIALIARAGIRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLRLWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWNVQFGQITSRNSFWSTRYFKYPSNIYLSPRYLGNSPYDIALWKLSAPVTYKHJOPICLQAIFFFFENTSCWYPGWGYIKEDEALPSPHTLQEVQNIINNSWCNHIPLKYSPRKDIFGDWVCAGNAQCKDAGACFGSGGGPLACNKNGLWYQIGVVSWGVGCGRPNRPGYTNISHHFFWIQKLMAQSGMSQPDPSWPLLFFPLLWALPLLGPV"
Schoenfeld, J., Seshagiri, S., Simmons, L., Singh, J., Smith, V!, Stingh, D., Vagte, A., Vandlen, R., Watanabe, C., Wieand, D., Woode, K., Xie, M. H., Yansura, D., Yi. S., Yu. G., Yuan, J., Zhang, M., Zhang, R., Zhang, M., Zhang, A., Wood, W.I. and Godowski, P.

The Secreted Protein Discovery Initiative (SPDI), a Large-Scale
Effort to Identify Novel Human Secreted and Transmembrane Proteins:
A Bioinformatics Assessment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTACACCCGTTACTTCGTATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGCCCCGTTATCAGGACCATGCGGCCG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121 ACGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCGAACTCGGGCGTTGGCCGTG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      244 crescencreseseseseseseseseseseses 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA 363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC 423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACATCCAGCC 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGCGGGAGAGGAGGCCATGGGCGCGCGCGGGCGCTGCTGCTGCTGCTGCTGCTCG 63
                                                                                                                                                     Clark, H.F.
Direct Submission
Submitted (01-AUG-2003) Department of Bioinformatics, Genentech,
Inc., 1 DNA Way, South San Francisco, CA 94080, USA
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        124 ACGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCGAACTCGGGCGTTGGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCAGGGGAGCCTGCGCCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCAGGGGACCTGTGGGCTTCTCCCACGTATGCGGAGTGAGCCTGCTCCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GIGGAIGGICCAGITIGGCCAGCIGACITCCAIGCCAICCTICIGGAGCCIGCAGGCCIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99.1%; Score 1090.6; DB 9; Length 1100; 99.6%; Pred. No. 1.5e-264; ative 0; Mismatches 4; Indels 0;
                                                                                                               Genome Res. 13 (10), 2265-2270 (2003)
                                                                                                                                                                                                                                                         /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="DNA42551"
                                                                                                                                                                                                                                                                                                                    1. .1100
/locus tag="UNQ266"
20. .964
/locus_tag="UNQ266"
                                                                                                                                                                                                                                                                                                                                                                                       /note="PRO303"
/codon_start=1
                                                                                                                                             (bases 1 to 1100)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity
Matches 1093; Conserv
                                                                                                                              12975309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                            AUTHORS
TITLE
JOURNAL
                                                                                                                            PUBMED
REFERENCE
                                                                                                                                                                                                                                                                                                                           gene
                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                      Sas
                                                                                                                                                                                                                           PEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
```

g

ઠે

음 장

셤

g

ઠે

8

성 음 상 g ठे g ઠે 쉱 5, 2005, 04:37:28

Search completed: March Job time: 5122.55 secs

```
AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTCCAAGTCAGGCCCTGGTTCTTCTG 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTCCTGGCCGCTACTTTTTCCCTCTTCTGGGCTCTCCCACTCCTGGGGCCGGTCTG 960
                                                                                                                                                                                                                                                                                                                                                                                                                          CGTGAGCTGGGGAGTCGGCTGTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAG 840
                                                                                                                                         360
                                                                                                                                                                                                                                                                                                                   GGTCGCCATCATAAQAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA 660
                                                                                                                                                                                                                                                                                                                                                                                        780
                                                                                                                                                                                                                                                                                                                                                                                                         774
                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                     240
                                                                                                      300
                                                                                                                                                                           420
                                                                                                                                                                                                             480
                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                               534
                                                                                                                                                                                                                                                                                 600
                                                                                                                                                                                                                                                                                                  594
                                                                                                                                                                                                                                                                                                                                                                       714
                                   180
                                            294
                                                                                                                                                          354
                                                                                                                                                                                            414
                                                                                                                                                                                                                              474
GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCG 120
          CTGGGCACTCACGGCGCGCCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCTCCGG
                                                                                                                                                  CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC
                                                                                                                                                                                                             CTATGACATTGCCTTGGTGAAGCTGTCTGCACTGTCACCTACACTAAACACATCCAGCC
                                                                                                                                                                                                                        CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTTAAACACACAGCC
                                                                                                                                                                                                                                               CATCTGTCTCCAGGCCTCCACATTTGACTTTGACAACCGGACACTGCTGGGTGACTGG
                                  ACGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCGAACTCGGGGGTTGGCCGTG
                                                                                                                                          GTGGATGGTCCAGTTTGGCCAGCTGCCATGCCATCCTTCTGGAGCCTGCAGGCCTA
                                                                                                                                                                                    CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCTCCAGGAAGTTCA
                                                                     GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ARAKARAKAKAKARARARA 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                              841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    961
                 61
                                    121
                                                     121
                                                                      181
                                                                                       181
                                                                                                                         241
                                                                                                                                           301
                                                                                                                                                            295
                                                                                                                                                                             361
                                                                                                                                                                                               355
                                                                                                                                                                                                               421
                                                                                                                                                                                                                                415
                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                  475
                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                      595
                                                                                                                                                                                                                                                                                                                                                        199
                                                                                                                                                                                                                                                                                                                                                                          655
                                                                                                                                                                                                                                                                                                                                                                                          721
                                                                                                                                                                                                                                                                                                                                                                                                           715
                                                                                                                                                                                                                                                                                                                                                                                                                            781
                                                                                                                                                                                                                                                                                                                                                                                                                                             775
  61
                                                                                                         241
```

g

6 6 6 6 6

ò

g

Š

8 6 8 6 8 6 8

õ

a

8 8

ò

셤

õ

8 6 8 6

8

ద

ద

ò

	Ltd.
5.1.6	Compugen
Ve.	- 2005
enCore	1993
සි <u>'</u>	છ
	Copyright

OM protein - protein séarch, using sw model

February 27, 2005, 20:11:50 ; Search time 25.5815 Seconds (without alignments) 1181.014 Million cell updates/sec Run on:

Title: Perfect score: Sequence:

US-10-040-647-6 1728 1 MGARGALLLALLARAGLRK......PSWPLLFPPLLWALPLLGPV 314

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

283416 seqs, 96216763 residues Searched:

283416 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

PIR_79:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

STIMMARTES

	Description	prostasin (RC 3.4.	trypt	a kal	tryptase (EC 3.4.2	$\overline{}$	(E)	æ	a)	(EC 3	tryptase (EC 3.4.2	kallikr	tryptase (EC 3.4.2	m U	£	hepsin (EC 3.4.21.	testicular serine	ĕ	(EC 3	ന	punoq-	plasmin (EC 3.4.21	tryptase (EC 3.4.2	hepsin (EC 3.4.21.	apoprotein(a) (EC	low-density lipopr	enteropeptidase (E	acrosin (EC 3.4.21	testicular serine	enteropeptidase (E
																													•	
SUMMARIES	ID	A57014	856160	KOMSPL	. C35863	A38654	A35863	KORTPL	A47246	B35863	A32410	конпр	JC4171	A45754	KFHU1	S00845	JE0105	A34170	JX0172	· DHTId	JC7731	A61545	S68702	S33777	S00657	JE0315	A43090	S29599	JE0104	A56318
	8	н	7		~			-	7	~	N	٦	N	N	٦	٦	~	ч	7	•	~	•	•	•	ч	•	-	~	~	Н
	Query Match Length	343	270	638	275	276	275	638	273	275	275	638	274	274	625	417	366	415	436	810	852	455	237	416	4548	1113	1035	421	367	1019
d	Query Match	33.5	30.3	29.7	29.7	29.6	29.5	29,5	29.5	29.5	29.2	29.3	28.9	28.8	27.7	27.6	27.5	26.5	26.5	26.3	26.3	26.2	26.1	25.8	25.7	25.6	25.5	25.4	25.4	25.3
	Score	579.5	523.5	513.5	513	511	510	510	509	509	509	507	499	498.5	478.5	476.5	474.5	457.5	457.5	454.5	454	453	451.5	446	443.5	443	441	439.5	439	438
	Result No.		7	m	4	ഗ	ø	7	80	σ	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	56	27	58	29

ALIGNMENTS

	RESULT 1	
	A57014	
	prosetasin (EC 3.4.21) Predursor - human C.Snecies Homo saniens (man)	
	C. Date: 24-May-1996 #sequence revision 24-May-1996 #text_change 09-Jul-2004	
	C; Accession: AS7014; AS4866	
	K; Yu, J.X.; Chao, L.; Chao, J. J. Biol. Chem. 270. 13483-13489. 1995	
	A,Title: Molecular cloning, tissue-specific expression, and cellular localization of hume	ation of hume
	A; Reference number: A57014; MUID:95286644; PMID:7768952 A: Accession: A57014	
-	A;Status: translated from GB/EMBL/DDBJ	
	A;Molecule type: mRNA A:Residues: 1-343 /RRS	
	A;Cross-references: UNIPROT:Q16651; GB:L41351; NID:g862304; PIDN:AAC41759.1; PID:g862305	PID:9862305
	A, Experimental gource: prostate	
	A; Note: parts of this sequence were determined by protein sequencing	
	r;ru, o.v.; Cnac, L.; Cnac, U. J. Biql. Chem. 269. 18848. 1994	
	A; Title: Prostasin is a novel human serine proteinase from seminal fluid. Purification,	rification, t
	A;Reference number: A54866; MUID:94308140; PMID:8034638	
	A; Accession: A54866	
	A; Molecule type: protein	
	A keelides: 45-64 < YUA>	
	A Contention	
	Ajecine Guestrose CDR.676446. OMIM.600823	
	A. Map position: 16011.2-16011.2	
	C; Superfamily: trypsin; trypsin homology	
	C; Keywords: glycoprotein; hydrolase; serine proteinase; transmembrane protein	-
	F;1-32/Domain: gignal sequence #status predicted <sig></sig>	
	F;33-44,45-343/Product: prostasin #status predicted <mat></mat>	
	F:33-44/Domain: prostasin Light chain #status predated <th></th>	
	F/8-2-343/ Domain: Program no may continue predicted <u> 10.000 Domain: Program no may continue no may cont</u>	
	F.323-341/Domain: transmembrane #status predicted <tmm1></tmm1>	
	F;37-154,70-86,168-244,201-223,234-262/Disulfide bonds: #status predicted	
	F;85,134,238/Active site: His, Asp, Ser #status predicted	
	F;159/Binding site: carbohydrate (Asn) (covalent) #status experimental	
	Query Match 33.5%; Score 579.5; DB 1; Length 343;	
	best nocal Similarity 41.0%; Fred. NO. 2.88-44; Matches 141; Conservative 45; Mismatches 101; Indels 57; Gaps 12;	12;
	QV 6 ALLLALLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLRLWDSH 65	S
		. 8
_		
	QY 66 VCGVSLLSHRWALTAAHCPETYSDLSDPSGWNVQPGQLTSMPSFWSLQAYYTR 118	18
	DD 69 VCGCSLVSEQWVLSAAHCFPSEHHKEAYEVKLGAHQLDSYSEDAKVST 116	16
-		

```
A;Cross-references: UNIPROT:P26562; GB:M58588; NID:g200358; PIDN:AAA63393.1; PID:g200359
A;Note: part of this sequence, including the amino ends of both the heavy and light chair c;Comment: This protein, synthesized in the liver, dirculates as a noncovalent complex wi c;Comment: The zymogen is activated by factor XIIa, which cleaves the molecule into a lig are linked by one or more disulfide bonds.
C;Compent: The zymogen is activated by factor XIIa, which cleaves the molecule into a lig c;Cyberfamily: coagulation factor XI; trypsin homology
C;Keywords: blood coagulation factor XI; trypsin homology
C;Keywords: blood coagulation factor XI; trypsin homology
F;10-199/Domain: signal sequence #status predicted <SIG>F;20-109/Domain: apple repeat <APP>F;20-109/Domain: apple repeat <APP>F;20-109/Domain: apple repeat <APP>F;20-289/Domain: apple repeat <APP>F;20-289/Domain: apple repeat <APP>F;39-638/Product: plasma kallikrein light chain #status experimental <LCH>F;39-621/Domain: apple repeat <APP>F;21-138/Domain: apple repeat <APP>F;21-388/Domain: apple repea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              151 KHIQPICLQASTFEFENRTDCWVTGWGYIKEDEALPSPHTLQEVQVAIINNSMCNHLFLK 210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 387 INARIVGGTNASLGEWPWQVSLQVKLVSQTHLCGGSIIGRQWVLTAAHCFDGIPYPDVWR 446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           497 EFQKPICLPSKADTNTIYTNC#VTG#GYTKEQG--ETQNILQKATIPLVPNEECQKKYRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        93 PSGWMVQFGQLT-SMPSFWSLQAYYTRYFVSNIYLSPRY-LGNSPYDIALVKLSAPVTYT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          211 YSFRKDIFGDMVCAGNAQGGKDACFGDSGGPLACNKDGLWYQIGVVSWGVGCGRPNRPGV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       38 ITSRIVGGEDAELGRWPWQGSLR---LWDSHVCGVSLLSHRWALTAAHCFE--TYSDLSD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 40.2%
Matches 101; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         271 YTNISHHFEWI 281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  || :| : :||
611 YTKVSEYMDWI 621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A,Accession: C35863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R; Vanderslice, P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Agreed kallikrein (EC 3.4.21.34) precursor - mouse C; Species: Mus musculus (house mouse) C; Species: Mus musculus (house mouse) C; Species: Mus musculus (house mouse) C; Species: O-Sep-1992 #text_change 09-Jul-2004 C; Accession: A35557 R; Seidah, N.G.; Sawyer, N.; Hamelin, J.; Mion, P.; Beaubien, G.; Brachpapa, L.; Rochemon DNA Cell Biol. 9, 737-748, 1990 A; Title: Mouse plasma kallikrein: CDNA structure, enzyme characterization, and comparisc A; Accession: A35557.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cross-references: UNIPROT:P50342; EMBL:D31789; NID:9517122; PIDN:BAA06598.1; PID:95173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RiMurakumo, Y.; Ide, H.; Itoh, H.; Tomita, M.; Kobayashi, T.; Maruyama, H.; Horii, Y.; Blochem, U. 309, 921-926, 1995
Blochem, U. 309, 921-926, 1995
A;Title: Cloning of the cDNA encoding mast cell tryptase of Mongolian gerbil, Meriones A;Reference number: S56160; MUID:95366971; PMID:7639711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ģ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LLAVSRIITHPTFYATONGADIALLELKNPVNISSHVHPVSLPPASETFPSGTLCWVTGW 155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                213
                                                               178 YIKEDEALPSPHTLQEVQVAIINNSMCNHLF---LKYSFRKDIFGDMVCAGNAQGGKDAC 234
                                                                                                                                                                                                            235 FGDSGGPLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQ-----KLMA 286
                                                                                                                                                                                                                                                                                                                                                  235 QGDSGGPLSCPVEGLWYLTGIVSWGDACGARNRPGVYTLASSYASWIQSKVTELQPRVVP 294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF-- 120
                      YFVSNIYLSPRYL-GNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFFENRTDCWVTGWG 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         51 -RHFCGGSLIHPQWVLTAAHC--VGPTIADPNKVRVQ------LRKQYLYYHDH 95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     mast cell tryptase precursor - Mongolian jird
C,Species: Meriones unguiculatus (Mongolian jird)
C,Date: 27-Oct-1995 #sequence_revision 03-Nov-1995 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             7 LLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR----LW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ---VSNIYLSPR-YLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GYIKEDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKD----IFGDMVCAGNAQGGKD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SCQGDSGGPLVCKVNGTWLQAGVVSWGEGCALPNRPGIYTRVTYYLDWIHR 264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       233 ACFGDSGGPLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQK 283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          45;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30.3%; Score 523.5; DB 2; Length 270; 40.2%; Pred. No. 2.2e-39;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       287. QSGMSQPDPSW------PLLFFPLLWALPLLGP 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          <u><b><u>ÖTQESQPDSNLCGSHLAFSSAPAQGLLRPILFLPLGLALGLLSP</u> 338</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          37; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Cross-references: Unitraction: C;Superfamily: trypsin; trypsin homology F;26-262/Domain: trypsin homology <TRY>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity 40.2%
Matches 117; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Residues: 1-270 < MUR>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A, Molecule type: mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C; Accession: S56160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Accession: S56160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KOMSPL
                                                                                         셤
                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                ò
```

œ

23;

29.7%; Score 513.5; DB 1; Length 638; 40.2%; Pred. No. 5e-38; Live 42; Mismatches 85; Indels 23

```
A;Accession: E38863
A;Molecule type: DNA
A;Residues: 1-9 <402>
A;Cross-references: GB:M33494; NID:g3927804; PIDN:AAC83172.1; PID:g339977
A;Cross-references: GB:M33494; NID:g3927806; PIDN:AAC83172.1; PID:g339977
A;Note: the first nine residues of this sequence are inferred from genomic DNA of tryptas
tryptese (EC 3.4.21.59) III precursor - human (rSpecies: Homo sapiens (man) (2.5pecies: Homo sapiens) (2.5pecies: Homo sapiens) (Man) (Ma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A,Molecule type: mRNA
A,Residues: 9-131, /K', 132-275 <VA3>
A)Residues: 9-131, /K', 132-275 <VA3>
A)Residues: 9-131, /K', 132-275 <VA3>
C)Superfemences: GB:M33493; NID:g339984; PIDN:AAA36780.1; PID:g339985
C)Superfemily: trypsin; trypsin homology
C,Superfemily: trypsin; trypsin homology
C,Reywords: hydrolase; serine proteinase; zymogen
F;1-21/Domain: signal sequence #status predicted <SIG>
F;22-30/Domain: activation peptide #status predicted <ACT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               submitted to GenBank, April 1990
A;Reference number: A38893
A;Accession: A38893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Molecule type: mRNA
A; Residues: 9-275 < VAN>
```

A, Molecule type: mRNA A, Residues: 1-638 <SEI>

```
F;32-268/Domain: trypsin homology <TRY>
F;75,122,225/Active site: His, Asp, Ser #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Molecule type: DNA
A; Residues: 1-275 < VAN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Accession: A60939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Accession: A39326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Accession: D35863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Accession: A35863
                                                                                                                                                                                                                  32
                                                                                                                                                                                                                                                                                                                                                                                         81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  245
                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                               윱
                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A, Molecule type: DNA A, Residues: 1-276 <REYS A, Residues: 1-276 <REYS A, RESIDUES: 1-276 <REYS A, CTOSS-A-CTEVENCES: UNIPROT: P21845; GB: M57625; NID: G200506; PIDN: AAA39987.1; PID: G200507 A, Note: the authors translated the codon CGC for residue 24 as Ala, GAG for residue 37 as Gly, GAG for residue 148 as Gly, GAG for residue 168 as Gly, and GAA for 185 as Gly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Molecule type: mRNA
A;Residues: 1-276 <RE2.
A;Residues: 1-276 <RE2.
A;Cross-references: GB:M57626; NID:g200508; PIDN:AAA39888.1; PID:g200509
R;Reynolds, D.S.; Stevens, R.L.; Lane, W.S.; Carr, M.H.; Austen, K.F.; Serafin, W.E.
Proc. Natl. Acad. Sci. U.S.A. 87, 3230-3234, 1990
A;Title: Different mouse mast cell populations express various combinations of at least
A;Reference number: A35646; MUID:90222202; PMID:2326280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R;Huang, R.; Abrink, M.; Gobl, A.E.; Nilsson, G.; Aveskogh, M.; Larsson, L.G.; Nilsson, Scand. J. Immunol. 38, 359-367, 1993
Scand. J. Immunol. 38, 359-367, 1993
A;Title: Expression of a mast cell tryptase in the human monocytic cell lines U-937 and A;Reference number: I59478; MUID:94023807; PMID:8210998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   mast cell proteinase 6 (EC 3.4.21.-) precursor - mouse
C;Species: Mus musculus (house mouse)
C;Date: 21-Peb-1992 Hegeuence revision 17-Peb-1994 #text_change 09-Jul-2004
C;Accession: A38654; B38654; D35646; I59478
R;Reynolds, D.S.; Gurley, D.S.; Austen, K.F.; Serafin, W.E.
J. Biol. Chem. 266, 3847-3853, 1991
A;Title: Cloning of the CDNA and gene of mouse mast cell protease-6. Transcription by I
A;Reference number: A38654; MUID:91139682; PMID:1995638
                                                                                                                                                                                   10;
                                                                                                                                                                                                                                                                                                                                                                                               103 PVSRIIVHPQFYTAQIGADIALLELEEPVNVSSHVHTVTLPPASETFPPGMPCWVTGMGD 162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    64 --SHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWWVQFGQLTSMPSFWSLQAYYTRYF- 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121 -VSNIYLSPR-YLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGY 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               179 IKEDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKD----IFGDMVCAGNAQGGKDAC 234
                                                                                                                                                                                                                                                                                           5 LLLALPVLASRA-----YAAPAPGQALQRV---GIVGGQEAPRSKWPWQVSLRVRDR 53
                                                                                                                                                                                                                                       7 LLLAL--LLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLRLWD-
                                                                                                                                                                                   36; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          coss-references: GB:L31853; NID:g473480; PIDN:AAA39725.1; PID:g473481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     :1-21/Domain: signal sequence #status predicted <SIG>
:22-31/Domain: activation peptide #status predicted <ACT>
:32-276/Product: mast cell proteinase 6 #status experimental <AAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                235 PGDSGGPLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWI 281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  221 QGDSGGPLVCKYNGTWLQAGVVSWGEGCAQPNRPGIYTRVTYYLDWI 267
                                                                                                                         29.7%; Score 513; DB 2; Length 275; 40.1%; Pred. No. 2e-38;
                                                                                                                                                                                   93; Indels
F;31-275/Product: tryptase I #status predicted <MAT>
F;31-267/Domain: trypsin homology <TRY>
F;74,121,224/Active site: His, Asp, Ser #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Status: preliminary; translated from GB/EMBL/DDB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Introns: 24/1; 79/2; 168/1; 222/3
Superfamily: trypsin; trypsin homology
Keywords: hydrolase; serine proteinase; zymogen
                                                                                                                                                                                43; Mismatches
                                                                                                                                                     Best Local Similarity Tv...
Matches 115; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Molecule type: protein Residues: 32-54 <RE3>
                                                                                                                                                  Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Residues: 1-276 <RES>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Accession: D35646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Accession: B38654
                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Accession:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                  ద
                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                         요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
```

```
C;Species: Homo sapiens (man)
C;Species: Homo sapiens (man)
C;Date: 12-0ct-1990 #sequence_revision 12-0ct-1990 #text_change 09-Jul-2004
C;Dates: 12-0ct-1990 #sequence_revision 12-0ct-1990 #text_change 09-Jul-2004
C;Accession: A35863, D35863; A60939; A39326
R;Vanderslice, P.; Ballinger, S.M.; Tam, E.K.; Goldstein, S.M.; Craik, C.S.; Caughey, G.F.
Proc. Natl. Acad. Sci. US.A. 87, 3811-3815, 1990
A;Title: Human mast cell tryptase: multiple cDNAs and genes reveal a multigene serine processine number: A35863; MUID:90251647; PMID:2187193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Molecule type: protein
A; Residues: 31-38,'P',40-41,'X',43,'T',45-48,'X',50 <BUT>
A; Experimental source: mast cell
A; Note: 44-G1y was also found
R; Cromlish, J.A.; Seidah, N.G.; Marcinkiewicz, M.; Hamelin, J.; Johnson, D.A.; Chretien,
J. Biol. Chem. 262, 1363-1373, 198
A; Title: Human pituitary tryptase: molecular forms, NH-2-terminal sequence, immunocytocht
A; Reference number: A39326; MUID:87109258; PMID:3543004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Cross-references: UNIPROT:Q15661; GB:M33494; NID:g3927804; PIDN:AAC83172.1; PID:g33997;
                                                                                       ő
                                                                                                                                                                                                                                                                                                                                                                                                                      --IKSPOLFRVO-----LREQYLYYGDOLLSLNRIVVHPHYYTAEGGADVALL 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRY----FVSNIYLSPR-YLGNSPYDIALV 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             142 KLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIKEDEALPSPHTLQEVQVAIINN 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SMCNHLFLKYSFRKDIF----GDMVCAGNAQGGKDACFGDSGGPLACNKDGLWYQIGVVS 257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25 PANQRV---GIVGGHEASESKWPWQVSLRFKLNYW-IHFCGGSLIHPQWVLTAAHCVGPH 80
                                                                                                                                                                          PCGRRVITSRIVGGEDAELGRWPWQGSLRL----WDSHVCGVSLLSHRWALTAAHCFETY
                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
С
                                                                                       34;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A, Molecule type: mRNA
Aseaidues: 1-275 < VA2>
A; Residues: 1-275 < VA2>
A; Cross-references: GB:N33491
R; Butterfield, J.H.; Weller, D.A.; Hunt, L.W.; Wynn, S.R.; Roche,
J. Leukoc. Biol. 47, 409-419, 1990
A; Title: Purification of tryptase from a human mast cell line.
A; Reference number: A60939; WUID:90244210; PMID:2110591
    DB 2; Length 276;
                                                                                       88; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Fil-21/Domain: signal sequence #status predicted <SIG>Fi22-30/Domain: activation peptide #status predicted <ACT>Fi31-275/Product: tryptase I #status experimental <MAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     F;31-267/Domain: trypain homology <TRY>
F;74,121,224/Active site: His, Asp, Ser #status predicted
Query Match

29.6%; Score 511; DB 2;
Best Local Similarity 39.3%; Pred. No. 3e-38;
Matches 106; Conservative 42; Mismatches E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C, Superfamily: trypsin; trypsin homology
C, Keywords: hydrolase; serine proteinase; zymogen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    258 WGVGCGRPNRPGVYTNISHHFEWIQKLMAQ 287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    tryptase (EC 3.4.21.59) I precursor - human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Introns: 21/1; 78/2; 177/1; 221/3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Molecule type: protein
A;Residues: 31-38 <CRO>
A;Experimental source: pituitary
```

ò ద 8 셤 ò g ò

```
duplication; fibrinolysis; glycoprotein; hydrolase; inflan
                                                                                                                                                                                         F)110-199/Domain: apple repeat <AP2>
F)200-289/Domain: apple repeat <AP3>
F)201-280/Domain: apple repeat <AP3>
F)291-6380/Domain: apple repeat <AP4>
F)291-6380/Domain: apple repeat <AP4>
F)391-6380/Domain: apple repeat <AP4>
F)391-6380/Domain: typsin homology <TRY>
F)391-621/Domain: trypsin homology <TRY>
F)391-621/Domain: trypsin homology in the second sec
                                                       F;1-19/Domain: signal sequence #status predicted <81G>
F;20-390/Product: plasma kallikrein heavy chain #status experimental
F;20-109/Domain: apple repeat <APl>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ,434,483,578/Active site: His, Asp, Ser #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      29.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   42.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 42.4%
Matches 114; Conservative
          C; Keywords: blood coagulation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches 100; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Accession: A47246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A47246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A,Molecule type: mRNA
A,Residues: 1-638 <RES>
A,Residues: 1-638 <RES>
A,Residues: 1-638 <RES>
C,Coment: This protein, synthesized in the liver, circulates as a noncovalent complex w C,Comment: The zymogen is activated by factor XIIa, which cleaves the molecule into a light are linked by one or more disulfide bonds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Cross-references: UNIPROT:P14272; GB:J05315
A;Note: the authors translated the codon GAG for residue 81 as Gln
R;Seidah; N.G.; Ladenheim, R.; Mbikay, M.; Hamelin, J.; Lutfalla, G.; Rougeon, F.; Lazur
DNA 8; 563-574, 1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Accession: S06851
A;Molecule type: protein
A;Residues: 20-45;391-413 <PAQ>
R;Seidah, N.G.; Ladenheim, R.; Mbikay, M.; Hamelin, J.; Lutfalla, G.; Rougeon, R.; Lazux
DNA Cell Biol. 8, 563-574, 1989
A;Title: The cDNA structure of rat plasma kallikrein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Cross-references: GB:M30282; NID:g205010; PIDN:AAA41463.1; PID:g205011
A;Note: part of this sequence, including the amino ends of both the heavy and light chai
R;Paquin, J.; Benjannet, S.; Sawyer, N.; Lazure, C.; Chretien, M.; Seidah, N.G.
Biochim. Biophys. Acta 999, 103-110, 1989
A;Title: Rat plasma kallikrein: purification, NH(2)-terminal sequencing and development
A;Reference number: S06851; MUID:90089457; PMID:2597701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                plasma kallikrein (EC 3.4.21.34) precursor - rat
NyAlternate names: Fletcher factor; kininogenin; serum kallikrein
NyAlternate names: Fletcher factor; kininogenin; serum kallikrein
C;Species: Ratius norvegicus (Norway rat)
C;Date: 30-Sep-1992 #sequence revision 30-Sep-1992 #text_change 09-Jul-2004
C;Accession: A39180; A33320; $68851; I53041; $68652
R;Beaubien, G.; Rosinski-Chupin, I.; Mattei, M.G.; Mbikay, M.; Chretien, M.; Seidah, N.G
Biochemistry 30, 1628-1635, 1991
A;Title: Gene structure and chromosomal localization of plasma kallikrein.
A;Reference number: A39180; MUID:91129236; PMID:1993180
                                                                                                         11;
                                                                                                                                                                                                                                                                                                                                                                                             -WDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWNVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                         --VSNIYLSPR-YLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWG 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     178 YIKEDEALPSPHTLQEVQVALINNSMCNHLFLKYSFRKD----IFGDMVCAGNAQGGKDA 233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     219
                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                   53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   162 DVDNDERLPPPFPLKOVKVPIMENHICDAKYHLGAYTGDDVRIVRDDMLCAGNTR--RDS
                                                                                                                                                                                                   7 LILLAL -- LLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLRL -- -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CQGDSGGPLVCKVNGTWLQAGVVSWGEGCAQPNRPGIYIRVIYYLDWI 267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CFGDSGGPLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWI 281
          Length 275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Title: The cDNA structure of rat plasma kallikrein. A;Reference number: A33320; MUID:90091743; PMID:2598771
     29.5%; Score 510; DB 2; 39.9%; Pred. No. 3.7e-38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A, Accession: A33320
A, Status: not compared with conceptual translation
                                                                                                    43; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Status: translated from GB/EMBL/DDBJ
                                                       Best Local Similarity 39,9
Matches 115, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Reference number: I53041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Molecule type: mRNA
A; Residues: 1-638 <SEI>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Molecule type: DNA
A;Residues: 1-638 <BEA>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Accession: A39180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Accession: I53041
                                                                                                                                                                                                                                                                                                                                                                                                  62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    234
     Query Match
```

```
CjAccession: A47246
R;McNeil, H.P.; Reynolds, D.S.; Schiller, V.; Ghildyal, N.; Gurley, D.S.; Austen, K.F.; & A. Reynolds, D.S.; Austen, K.F.; & A. Reference number: A47246; MUID:93087489; PMID:1454796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Status: preliminary
A;Molecule type: nucleic acid
A;Rolecule type: nulpRoT:Q02844; GB:L00653; NID:g200518; PIDN:AAA39992.1; PID:g200519
A;Note: sequence extracted from NCBI backbone (NCBIN:119745, NCBIP:119746)
C;Superfamily: trypsin; trypsin homology
C;Keywords: hydrolase; serine proteinase
F;29-265/Domain: trypsin homology <TRY>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    489
                                                                                                                                                                                     438
                                                                                                                                                                                                                                                   86 -TYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYFVSNIYLSPRY-LGNSPYDIALVKL 143
                                                                                                                                                                                                                                                                                                                                                                              144 SAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIKEDEALPSPHTLQEVQVAIINNSM 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      548 CQKKYRDYVITK----QMICAGYKEGGIDACKGDSGGPLVCKHSGRWQLVGITSWGEGCA 603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tryptase (EC 3.4.21.59) 2 - mouse
C;Species: Mus musculus (house mouse)
C;Date: 21-Sep-1993 #sequence_revision 18-Nov-1994 #text_change 09-Jul-2004
                                                                                                                                                                  380 SSDCTTK-INARIVGGTNSSLGEWPWQVSLQVKLVSQNHMCGGSIIGRQWILTAAHCFDG
                                                                                                                                                                                                                                                                                                                                                                                                                                        490 QIPLNYTEFQKPICLPSKADTNIYINCWVTGWGYTKERG--ETQNILGKATIPLVPNEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18 AAP--GPAMTR---EGIVGGQEAHGNKWPWQVSLRANDTYWMFFCGGSLIHPQWVLTAAH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                83 CFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF----VSNIYLSPR-YLGNSPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           137 DIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIKEDBALPSPHTLQEVQV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGGPLACNKDGLWYQIGVVSWGVGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26 AAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLRLWDS---HVCGVSLLSHRWALTAAH
                                                                                                                                                                                                                                                                                             30 SGPCGRRVITSRIVGGEDAELGRWPWQGSLR---LWDSHVCGVSLLSHRWALTAAHCFE-
                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              34;
29.5%; Score 510; DB 1; Length 638; 37.7%; Pred. No. 1e-37; tive 47; Mismatches 96; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 273;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           86; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 509; DB 2;
Pred. No. 4.5e-38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              35; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 264 RPNRPGVYTNISHHFEWIOKLMAOS 288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    604 RKEQPGVYTKVAEYIDWILEKIQSS 628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ::
::
::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
```

G; Superfamily: coagulation factor XI; trypsin homology

C;Genetics:

```
plasma kallikrein (EC 3.4.21.34) precursor - human
N;Alternate names: kininogenin; plasma prekallikrein
C;Species: Homo sapiens (man)
C;Date: 13-Aug-1986 #sequence_revision 13-Aug-1986 #text_change 09-Jul-2004
C;Accession: A00921; A37939
R;Chung, D;W.; Fujikawa, K.; McMullen, B.A.; Davie, E.W.
Biochemistry 25, 2410-2417, 1986
A;Title: Human plasma prekallikrein, a zymogen to a serine protease that contains four te
A;Reference number: A00921; MUID:86243359; PMID:3521732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Cross-references: UNIPROT:P15944; GB:M24664; NID:g163982; PIDN:AAA30854.1; PID:g163983; C;Superfamily: trypsin; trypsin homology
C;Keywords: hydrolase; serine proteinase; zymogen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Molecule type: mRNA
A;Residues: 1-638 <CHU>
A;Crose-treferences: UNIPROT:P03952; GB:M13143; NID:g190262; PIDN:AAA60153.1; PID:g190263
R;McMullen, B.A.; Fujikawa, K.; Davie, E.W.
Biochemistry 30, 2050-2056, 1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rivanderslice, P.; Craik, C.S.; Nadel, J.A.; Caughey, G.H.
Biochemistry 28, 4148-4155, 1989
A; Title: Molecular cloning of dog mast cell tryptase and a related protease: structural
A; Reference number: A32410; MUID:89352460; PMID:2504277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11;
                                        65 HVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF--VS 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      57 HICGGSLIHPQWVLTAAHC--VGPNVVCPERIRVQLRE------QHLYYQDHLLPVN 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 106 RIVMHPNYYTPENGADIALLELEDPVNVSAHVQPVTLPPALQTFPTGTPCWVTGWGDVHS 165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                182 DEALPSPHTLQEVQVAIINNSMCN---HLFLKYSFR-KDIFGDMVCAGNAQGGKDACFGD 237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               178 YIKEDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKD----IFGDMVCAGNAQGGKDA 233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        123 NIYLSPR-YLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIKE 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               64
                                                                                                                                                                                                                                                                                                                                 tryptase (EC 3.4.21.59) precursor - dog
C;Species: Canis lupus familiaris (dog)
C;Date: 12-Oct-1989 #sequence_revision 12-Oct-1989 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9 LALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLRL----WDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5 LVLALALLGSLVPVS----PAPGQALQRV---GIVGGREAPGSKWPWQVSLRLKGQYW-R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   32;
                                                                                                                                                          220 CQGDSGGPLVCKVNGTWLQAGVVSWGEGCAQPNRPGIYTRVTYYLDWI 267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SGGPLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQK 283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SGGPLVCRVRGVWLOAGVVSWGEGCAOPNRPGIYTRVAYYLDWIHO 269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          F.1-21/Domain: signal sequence #status predicted <SIG>
F.22-30/Domain: activation peptide #status predicted <ACT>
F.31-275/Product: tryptase #status predicted <MAT>
F.31-275/Domain: tryptase #status predicted <MAT>
F.31-267/Domain: trypsin homology <FRY:
F.31-267/Domain: trypsin homology <FRY:
F.31-224/Active site: His, Asp, Ser #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29.5%; Score 509; DB 2;
40.6%; Pred. No. 4.6e-38;
iive 40; Mismatches 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity 40.69
Matches 116, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Molecule type: mRNA
A; Residues: 1-275 < VAN>
                                                                                                                                                                                                                                                                                                                                                                                                                            C; Accession: A32410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Accession: A32410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Accession: A00921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    238
                                                                                                                          234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 11
                                               셤
                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ଚ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ਮੁ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          icross-references: UNIPROT:P20231; GB:M33492; NID:g339982; PIDN:AAA36779.1; PID:g339983; Mote: residues 2-275 are derived from mRNA; residue one was inferred from the genomic; Miller, J.S.; MoxLey, G.; Schwartz, L.B.

. Clin. Invest. 86, 864-870, 1990
. Tin. Invest. 86, 864-870, 1990
. The conting and characterization of a second complementary DNA for human tryptase.; Reference number: A37193; MUID:90369005; PMID:2203827
                                                                                                                                                                                                                                                                                                                                                                                      Lryptase (EC 3.4.21.59) II precursor - human

NiAlternate names: tryptase beta

C;Species: Homo sapiens (man)

C;Date: 03-Feb-1994 #sequence revision 03-Feb-1994 #text_change 09-Jul-2004

C;Accession: B35863; A37193; I59473

R;Vanderslice, P; Ballinger, S.M; Tam, B.K.; Goldstein, S.M.; Craik, C.S.; Caughey, C

R;Vanderslice, P; Ballinger, S.M; 3811-3815, 1990

A;Title: Human mast cell tryptase: multiple cDNAs and genes reveal a multigene serine I

A;Reference number: A35863; MUID:90251647; PMID:2187193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11;
                                                                                           DIALLKLTNPVNISDYVHPVPLPPASETFPSGTLCWVTGWGNIDNGVNLPPPFPLKKVQV 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -WDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     54 YW-MHPCGGSLIHPQWVLTAAHC--VGPDVKDLAALRVQLRE------QHLYYQDQL 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     --VSNIYLSPR-YLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWG 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23
                                                           197 AIINNSMCNHLFLKYSFRKD----IFGDMVCAGNAQGGKDACFGDSGGPLACNKDGLWYQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7 LILAL--LLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLRL---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LILALPVIASRA-----YAAPAPGQALQRV---GIVGGQEAPRSKWPWQVSLRVHGP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cross-references: GB:S5551; NID:g265666; PIDN:AAD13876.1; PID:g4261576
Experimental source: basophil cell line KU812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Molecule type: mRNA
Residues: 1-275 <MLL>
Cross-references: GB:M37488; NID:g179583; PIDN:AAA51843.1; PID:g179584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 275;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             92; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A.Cross-references: GDB:125890; OMIM:191080
A;Map position: 16pter-16qter
C;Superfamally: trypsin; trypsin homology
C;Superfamally: trypsin; trypsin homology
C;Superfamally: trypsin; trypsin homology
C;Superfamally: trypsin; trypsin homology
F;1-21/Domain: signal sequence #status predicted <SIG>F;2-30/Domain: activation peptide #status predicted <ACT>F;31-375/Product: tryptase I #status predicted <ACT>F;31-267/Domain: tryptase I #status predicted <ART>F;31-267/Domain: trypsin homology <TRY>F;74,121,224/Active site: His, Asp, Ser #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              29.5%; Score 509; DB 2; 39.9%; Pred. No. 4.6e-38; tive 43; Mismatches 92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Accession: I59473
Status: preliminary; translated from GB/EMBL/DDBJ
Molecule type: mRNA
                                                                                                                                                                                                               237 AGVVSWGEGCAQPNRPGIYTRVTYYLDWI 265
                                                                                                                                                                                253 IGVVSWGVGCGRPNRPGVYTNISHHFEWI 281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Molecule type: mRNA; DNA; Residues: 1-275 <VAN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
Matches 115; Conserval
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1-275 <RES>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Accession: B35863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Accession: A37193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gene: GDB:TPS1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Residues:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Genetics:
윱
                                                     δ
                                                                                                    셤
                                                                                                                                                                          8
                                                                                                                                                                                                                               요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
```

mast cell, it is up

```
C; Comment: This enzyme is basically specific for a connective tissue
                                                                                                                                                                                                                                                                                                                                                                                    Query Match 28.9%;
Best Local Similarity 39.3%;
Matches 116; Conservative 3:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 38.81
Matches 111; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A, Accession: A45754
A, Molecule type: mRNA
A, Residues: 1-274 <MIL>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A Map position: 495-4955
C, Superfamily: coagulation factor XI; trypsin homology
C, Superfamily: coagulation factor XI; trypsin homology
C, Superfamily: coagulation factor XI; trypsin homology
C, Superfamily: blood coagulation; duplication; fibrinolysis; glycoprotein; hydrolase; infla
F,1-19/Domain: signal sequence #status predicted <MAT>
F,20-638/Product: plasma kallikrein heavy chain #status predicted <HCH>
F,20-109/Domain: apple repeat <APP>
F,20-109/Domain: apple repeat <APP>
F,110-199/Domain: apple repeat <APP>
F,20-109/Domain: apple repeat <APP>
F,310-638/Domain: apple repeat <APP>
F,311-638/Domain: apple repeat <APP>
F,321-638/Domain: apple repeat <APP>
F,321-638/Domain: apple repeat <APP>
F,321-638/Domain: apple repeat <APP>
F,331-638/Domain: apple repeat <APP>
F,331-638/SAPACTIVE STURATE OF STURATE STURA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Molecule type: mRNA
A;Residues: 1-274 <IDE>
Ą;Cross-references: UNIPROT:P50343; DDBJ:D38455; NID:g556555; PIDN:BAA07486.1; PID:g5565
                                                                                                 A, Title: Location of the disulfide bonds in human plasma prekallikrein: the presence of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  T.; Maruyama, H.; Osada, Y.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WMVQFG----QLTSMPSFWSLQ--AYYTRYFVSNIYLSPRYLGNSPYDIALVKLSAPVT 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  149 YTKHIQPICLQASTFEFENRTDCWVTGWGYIKEDEALPSPHTLQEVQVAIINNSMCNHLF 208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       209 LKYSFRKDIFGDMVCAGNAQGGKDACFGDSGGFLACNKDGLWYQIGVVSWGVGCGRPNRP 268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        tryptase (EC 3.4.21.59) precursor - rat
N;Alternate names: mast cell tryptase
C;Species: Rattus norvegicus (Norway rat)
C;Date: 27-Aug-1995 #sequence_revision 27-Oct-1995 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       YTEFQKPICLPSKGDTSTIYINCWVTGWGFSKEKGEI--QNILQKVNIPLVTNEECQKRY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TSRIVGGEDAELGRWPWQGSLRL---WDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 87; Indels 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C,Accession: JC4171
R;Ide, H; Itch, H; Tomita, M; Murakumo, Y.; Kobayashi, T.; Maru, D. Biochem. 118, 210-215, 1995
A;Title: CDNA sequencing and expression of rat mast cell tryptase.
A;Reference number: JC4171; MUID:96015171; PMID:8537314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 29.3%; Score 507; DB 1; Length 638; Best Local Similarity 39.6%; Pred. No. 1.9e-37; Matches 105; Conservative 43; Mismatches 87; Indels
                                    A; Reference number: A37939; MUID: 91152016; PMID: 1998666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cross-references: GDB:127575; OMIM:229000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GVYTNISHHFEWI-OKLMAQSGMSQ 292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Accession: A37939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Accession: JC4171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
```

```
A Molecule type: mRNA
A, Residues: 1-274 <MI2>
A, Cross-references: GB-M30038
A, Cross-references: GB-M30038
A, Cross-references: GB-M30038
A, Note: the sequence from Fig. 4 is inconsistent with that from Fig. 2 in having 205-Pro
C, Superfamily: trypsin, trypsin homology
C, Reyords: hydrolase; serine proteinase; zymogen
F, 1-21/Domain: signal sequence #status predicted <SIG>
F, 1-21/Domain: activation peptide #status predicted <ACT>
F, 1-21/Active trypsin homology <TRY>
F, 31-224/Pomain: trypsin homology <TRY>
F, 31-266/Domain: trypsin homology <TRY>
F, 74, 120, 223/Active site: His, Asp, Ser #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA for human tryptase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ó.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100 LLTWNRTVWHPHYYTVEDGADIALLELEIPWNVSTHIHPISLPPASETFPSGTSCWVTGW 159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         63 DSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRY--- 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GYIKEDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKD----IFGDMVCAGNAQGGKD 232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RiMiller, J.S.; Westin, E.H.; Schwartz, L.B.
J. Clin. Invest. 84, 1188-1195, 1989
A;Title: Cloning and characterization of complementary DNA for human tryptase.
A;Reference number: A45754; MUID:90009311; PMID:2677049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C:Species: Homo sapiens (man)
C:Date: 03-Jun-1993 #sequence_revision 03-Jun-1993 #text_change 08-Sep-1997
C:Accession: A45754; B37193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       55 -MHFCGGSLIHPQWVLTAAHCVGLH--IKSPELFRVQ------LREQYLYYADQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            120 --FVSNIYLSPRYLG-NSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         160 GDIDSDEPLLPPYPLKQVKVPIVENSLCDRKYHTGLYTGDDVPIVQDGMLCAGNTR--SD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 LKLLLLLALSPL--ASLVHAAPC--PVKQRV---GIVGGREASESKWPWQVSLRFKFSFW
einase inhibitors.
C;Superfamily: trypsin, trypsin homology
C;Superfamily: trypsin, trypsin homology
C;Reywords: glycoprotein; hydrolase; mast cell; serine proteinase; zymogen
C;Rejvords: alyoprotein; psequence #status predicted <&IG>
F;1-19/Domain: activation peptide #status predicted <ACT>
F;30-29/Domain: activation peptide #status predicted <AMT>
F;30-214/Product: mast cell tryptase #status predicted <AMT>
F;30-266/Domain: trypsin homology <AFX #status predicted
F;73,120,223/Active site: His, Asp, Ser #status predicted
F;131/Binding site: carbohydrate (Asn) (covalent) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          7 LLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR----LW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                7 LILAL-LLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLRLWD--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           233 ACFGDSGGPLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQ 287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            218 SCQGDSGGPLVCKVKGTWLQAGVVSWGEGCAEANRPGIYTRVTYYLDWIHRYVPQ 272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Cross-references: GB:MJ0038
R;Miller, J.S.; Moxley, G.; Schwartz, L.B.
G.Clin. Invest. 86, 864-870, 1990
A;Title: Cloning and characterization of a second complementary A;Reference number: A37193; MUID:90369005; PMID:2203827
A;Accession: B37193
                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 274;
                                                                                                                                                                                                                                                                                                                                                                                                                          ; Score 499; DB 2; Length 274; Pred. No. 3.6e-37; 39; Mismatches 102; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28.8%; Score 498.5; DB 2; Length 38.8%; Pred. No. 4e-37; ive 44; Mismatches 96; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                =
=
=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tryptase (EC 3.4.21.59) alpha precursor - human
```

```
27.6%; Score 476.5;
41.1%; Pred. No. 6.2e
:ive 30; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A,Gene: GDB:HPN, TMPRSS1, hepsin
A,Cross-references: GDB:135685; OMIM:142440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity 41.19
Matches 115; Conservative
                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |||: ::||
YTNVVEYVDWI 618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      YTNISHHFEWI 281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             hepsin (EC 3.4.21.-) - human
                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Molecule type: mRNA
A;Residues: 1-417 <LEY>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Accession: S00845
                                                                                                                                                                                                               Local Simi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C; Genetics:
                                                                                                                                                                                                                  Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8,8
                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Accession: A37940
!Molecule type: protein
!Residues: 28-33;35-94;X',51-55,'X',57-63;70-75,'X',77-79;107-109,'X',111-112;132-139;
!Residues: 28-33;35-94;X',51-55,'X',318-319;320-326,'X',328-330;'X',347-349;373,'X',375
.Comment: The proenzyme consists of two identical chains linked by one or more disulfid
e active site, and a heavy chain, which associates with high molecular weight (HMW) kin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;Cross-references: GDB:119891; OMIM:264900
;Map position: 4q35-4q35
;Introns: 19/1; 73/2; 109/1; 162/2; 199/1; 252/2; 289/1; 343/2; 379/1; 435/2; 494/1; 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 पु
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     hydrd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Residues: 1-625 cASA>

;Cross-references: UNIPROT: P03951; GB:M18295

;Note: the sequence shown follows the authors' translation

;Fujikawa, K.; Chung, D.W.; Hendrickson, L.E.; Davie, E.W.

iochemistry 25, 2417-2424, 1986

;Title: Amino acid sequence of human factor XI, a blood coagulation factor with four

;Reference number: A00920; MUID: 86243360; PMID: 3635155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 presence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              **Herbway: blood coagulation intrinsic pathway:
**Bathway: blood coagulation intrinsic pathway:
**Superfamily: coagulation factor XI; trypain homology
**Keywords: blood coagulation; duplication; glycoprotein; hemophilia C; homodimer;
**Feywords: blood coagulation; duplication; glycoprotein; hemophilia C; homodimer;
***Is B/Domain: signal sequence #status predicted <8IG>
****1-18 Chomodimer; coagulation factor XIa heavy chain #status experimental <HCH>
*****1-108 Domain: apple repeat <API>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1888-625/Product: coagulation factor XIa light chain #status experimental <LCH>
1888-618/Domain: trypsin homology <TRY>
20-103,514-581,571-599/Disulfide bonds: #status predicted
                                                                                                                                                                                            180 KEDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKD----IFGDMVCAGNAQGGKDACF 235
                                                                                                                                                                                                                                                                                                    VSNIYLSPR-YLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYI 179
54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      coagulation factor XIa (EC 3.4.21.27) precursor [validated] - human
N;Alternate names: antihemophilic factor C; plasma thromboplastin antecedent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Species: Homo sapiens (man)
Date: 13-Aug-1986 #sequence revision 26-May-1994 #text_change 09-Jul-2004
LLLALPVLASRAYAAPAPAPAQALQQAG-----IVGGQEAPRSKWPWQVSLRVKDRY
                                                  -SHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF--
                                                                                    iochemistry 30, 2056-2060, 1991
Title: Location of the disulfide bonds in human coagulation factor XI:
Reference number: A37940; MUID:91152017; PMID:1998667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cross-references: GB:M13142; NID:9182832; PIDN:AAA52487.1; PID:9182833: MCMullen, B.A.; Pujikawa, K.; Davie, B.W. Cohemistry 30, 2056-2060, 1991
                                                                                                                                                                                                                                                                                                                                                                                                         ||||||||| :| | | |||||| || :||||| || ::: :||
GDSGGPLVCKVNGTWLQAGVVSWDEGCAQPNRPGIYTRVTYYLDWI 266
                                                                                                                                                                                                                                                                                                                                                                                GDSGGPLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWI 281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Title: Organization of the gene for human factor XI. Reference number: A27431; MUID:88107663; PMID:2827746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           F;29/Disulfide bonds: interchain #status experimental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Accession: A27431; A00920; A37940
Asakai, R.; Davie, E.W.; Chung, D.W.
lochemistry 26, 7221-7228, 1987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        109-198/Domain: apple repeat <AP2>
199-288/Domain: apple repeat <AP3>
290-379/Domain: apple repeat <AP4>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Molecule type: mRNA
Residues: 1-625 <FUJ>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Accession: A00920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Accession: A27431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Gene: GDB:F11
                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                             236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Genetics:
                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                               g
                                               ò
                                                                                            셤
                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                               셤
```

```
F;46-76,50-56,110-193,136-165,140-146,200-283,226-255,230-236,291-374,317-346,321-327,386
F;90,126,353,450/Binding site: carbohydrate (Asn) (covalent) #status predicted
F;339/Disulfide bonds: interchain #status predicted
F;337-380/Cleavage site: Arg-Ile (coagulation factor XIIa) #status experimental
F;431,480,575/Active site: His, Asp, Ser #status predicted
F;491/Binding site: carbohydrate (Asn) (covalent) #status experimental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        transmembrane dome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Cross-references: UNIPROT:P05981; EMBL:X07732; NID:g32063; PIDN:CAA30558.1; PID:g32064
                                                                                                                                                                                                                                                                                                                                                                 æ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   444 VYSGILNQ-SEIKEDTSFFGVQ------EIIIHDQYKMAESGYDIALLKLETTVNYT 493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               151 KHIQPICLQASTFEFENRTDCWVTGWGYIKEDEALPSPHTLQEVQVAIINNSMCNHLFLK 210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    80 AAHCPETYSDLSDPSGWMVQFGQLTSMPSFWSLQ-----AYYTRYFVSNIYLSPRYLGN 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            201 AAHCFPERNRVL--SRWRV-FAGAVAQASPHGLQLGVQAVVYHGGYLP---FRDPNSEEN 254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWG---YIKEDEALPSPHT 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       255 S-NDIALVHLSSPLPLTEYIQPVCLPAAGQALVDGKICTVTGWGNTQYYGQQAGV---- 308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C;Species: Homo sapiens (man)
C;Date: 31-Dec-1988 #sequence_revision 31-Dec-1988 #text_change 16-Aug-2004
C;Accession: S00845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21 PESQEAAPLSGPCGRRVI-TSRIVGGEDAELGRWPWQGSLRLWDSHVCGVSLLSHRWALT
                                                                                                                                                                                                                                                                                                                                                                                                                                       38 ITSRIVGGEDAELGRWPWQGSLRL---WDSHVCGVSLLSHRWALTAAHCF---ETYSDLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               92 DPSGWMVQFGQLTSMPSFWSLQAYYTRYFVSNIYLSPRY-LGNSPYDIALVKLSAPVTYT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         494 DSQRPICLPSKGDRNVIYTDCWVTGWGYRKLRDKI--QNTLQKAKIPLVTNBECQK---R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           YSFRKDIFGDMVCAGNAQGGKDACFGDSGGPLACNKDGLWYQIGVVSWGVGCGRPNRPGV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rileytus, S.P.; Loeb, K.R.; Hagen, F.S.; Kurachi, K.; Davie, E.W. Biochemistry 27, 1067-1074, 1988
A;Title: A novel trypsin-like serine protease (hepsin) with a putative A;Reference number: S00845; MUID:88209431; PMID:2835076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Map position: 19q11-19q13.2
C;Superfamily: trypsin homology
C;Keywords: hydrolase; liver; serine proteinase; transmembrane protein
F;23-45/Domain: transmembrane #status predicted <TMN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          F;163-400/Domain: trypsin homology <TRY>
F;188-204,291-359,322-338,349-381/Disulfide bonds: #status predicted
F;203,257,353/Active site: His, Asp, Ser #status predicted
                                                                                                                                                                                                                                                                                                                                                         23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 1; Length 417;
                                                                                                                                                                                                                                                                                   DB 1; Length 625;
                                                                                                                                                                                                                                                                                                                                                             86; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5.2e-35;
hea 96;
                                                                                                                                                                                                                                                                               27.7%; Score 478.5; DB 1
40.6%; Pred. No. 6.7e-35;
tive 40; Mismatches 86
```

```
191 LQEVQVAIINNSMCNHLFLKYSFRKDIFGD-----MVCAGNAQGGKDACFGDSGGPLAC- 244
```

36	
CCDSCCPFVCE	
Y PEGGIDAC	
21 KPKMFCAG	יסט דעודייויים דעודייייויס מונים מסטיטיייסעיטידיס דיסעני זסמי
GADFYGNC	חיקיים מינים מי
C	CONTRACTOR AND ADDRESS OF THE PARTY OF THE P
EAKVPIISNDV	- 1
309 LQEAKV	270

g

ò

දු පු

DD 301 DSLSKTFKWKLUGIVSWGIGCALAQKFGVTIKVSDFKEW Search completed: February 27, 2005, 20:23:27 JOb time : 26.5815 Becs

Sequence Sequence Sequence Sequence

Sequence Sequence Sequence

Sequence Sequence Sequence Sequence

Sequence Sequence Sequence

Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence

Sequence Sequence Sequence Sequence

Sequence Sequence Sequence Sequence

Perfect score:

ä

Run

Sequence:

Scoring table:

Searched:

Database

```
Sequence 6 Application US/10040647

Publication No. US20030092154A1

Publication No. US20030092154A1

GENERAL INFORMATION:

TITLE OF INVENTION: NOVEL MOLECULES

NUMBER OF SEQUENCES: 30

CORRESPONDENCE ADDRESS:

ADDRESSE: SCULLY, SCOTT, MURPHY & PRESSER

STREET: 400 GARDEN CITY PLAZA

CITY: GARDEN CITY

STATE: NEW YORK

COUNTRY: USA

ZIP: 11530

COMPUTER READABLE FORM:

MEDITM TYPE: PLAZA

MEDITM TYPE: PLAZA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION DATA:
APPLICATION UMBER: 09/023,942
PILING DATE: -UNKNOWN-
APPLICATION NUMBER: P05101/97
FILING DATE: 13-FEB-1997
FILING DATE: 18-NOV-1997
FILING DATE: 18-NOV-1997
FILING DATE: 18-NOV-1997
APPLICATION NUMBER: International PCT Application
FILING DATE: 13-FEB-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
RPLICATION NUMBER: US/10/040,647
FILING DATE: 07-Jan-2002
CLASSIFICATION: <Unknown>
                  US-09-907-575-257
US-09-905-075-257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-902-759-257
US-09-902-634-257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAMÉ: DIGIGLIO, FRANK S
REGISTRATION NUMBER: 31,346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
  \begin{array}{c} ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\ ... \\
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JS-10-040-647-6
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 1
  Sequence 3, Appli
Sequence 257, App
                                                                                                                                                  ; Search time 89.2843 Seconds (without alignments)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                   1728
1 MGARGALLLALLLARAGIRK......PSWPLLFFPLLWALPLIGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Published Applications AA:*

1: /cgn2 6/ptodata/1/pubpaa/PCT_PUBCOMB.pep:*

2: /cgn26/ptodata/1/pubpaa/PCT_PUBCOMB.pep:*

3: /cgn2 6/ptodata/1/pubpaa/PCT_PUBCOMB.pep:*

4: /cgn2 6/ptodata/1/pubpaa/USO6_NEW_PUB.pep:*

5: /cgn2 6/ptodata/1/pubpaa/USO8_NEW_PUB.pep:*

6: /cgn2 6/ptodata/1/pubpaa/USO8_NEW_PUB.pep:*

7: /cgn2 6/ptodata/1/pubpaa/USO8_NEW_PUB.pep:*

8: /cgn2 6/ptodata/1/pubpaa/USO8_NEW_PUB.pep:*

9: /cgn2 6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*

10: /cgn2 6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*

11: /cgn2 6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*

11: /cgn2 6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:*

13: /cgn2 6/ptodata/1/pubpaa/USO9_NEW_PUB.pep:*

14: /cgn2 6/ptodata/1/pubpaa/USIOA_PUBCOMB.pep:*

15: /cgn2 6/ptodata/1/pubpaa/USIOA_PUBCOMB.pep:*

16: /cgn2 6/ptodata/1/pubpaa/USIOA_PUBCOMB.pep:*

17: /cgn2 6/ptodata/1/pubpaa/USIOD_PUBCOMB.pep:*

18: /cgn2 6/ptodata/1/pubpaa/USIOD_PUBCOMB.pep:*

18: /cgn2 6/ptodata/1/pubpaa/USIOD_PUBCOMB.pep:*

19: /cgn2 6/ptodata/1/pubpaa/USIOD_PUBCOMB.pep:*

10: /cgn2 6/ptodata/1/pubpaa/USIOD_PUBCOMB.pep:*
                      GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-968-415-3
US-09-909-320-257
US-09-909-088B-257
US-09-905-291A-257
US-09-907-853-257
US-09-907-841-257
US-09-907-841-257
US-09-907-841-257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-903-640-257
US-09-908-093-257
US-09-906-742-257
                                                                                                                                                                                                                                                                                                                                                                                                                                            Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                   1385339 segs, 328044528 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SUMMARIES
                                                                                                                                                     2005, 20:22:41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                              OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                              US-10-040-647-6
                                                                                                                                                       February 27,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query
```

1723 1723 1723 1723 1723 1723 1723 1723

Result No.

```
US-09-909-320-257
                                                                                                                                                                                                                                                                                                                                                                                     US-09-968-415-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWNVQFGQITSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWYTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181 EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQXLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                             61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241 PLACNKDGLMYQIGVVSWGVGCGRPNRPGVYINISHHFEWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                       1 MGARGALLLALLLARAGIRKPESQEAAPLSGPCGRRVITSRIVGGEDABLGRWPWQGSLR 60
                                                                                                                                                                                                                                                                                                                                                                1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EDEALPSPHTLOEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                              Query Match 100.0%; Score 1728; DB 14; Length 314; Best Local Similarity 100.0%; Pred. No. 3.7e-159; Matches 314; Conservative 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDIUM TYPE: Diskette
CCMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEO for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/968,415
FILING DATE: 26-Sep-2001
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: HUMAN PROTEASE MOLECULES NUMBER OF SEQUENCES: 24
CORRESPONDENCE DADRESS:
ADDRESSE: Incyte Pharmaceuticals, Inc. STREET: 3174 Porter Dr. CITY: Palo Alto
STATE: CA
                                                                                                                                                                            TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 6:
REFERENCE/DOCKET NUMBER: 11168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 3, Application US/09968415; Sequence 3, Application US/09968415; Publication No. US20020086334A1
GENERAL INFORMATION:
APPLICANT: Bandman, Olga
Hillman, Jennifer L.
Yue, Henry
Guegler, Karl J.
Corley, Neil C.
Tang, Tom Y.
Shah, Purvi
              TELECOMMUNICATION INFORMATION:
TELEPHONE: (516) 742 4343
TELEFAX: (516) 742 4366
TELEX: 230 901 SANS UR
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
                                                                                                                                     LENGTH: 314 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301 FFPLLWALPLIGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ZIP: 94304
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY: USA
                                                                                                                                                                                                                                         US-10-040-647-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-968-415-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
```

```
61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 IMDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWNVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241 PLACNROGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFFWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 MGARGALILALILARAGIRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181 EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181 EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 314;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match

99.7%; Score 1723; DB 9;
Best Local Similarity 99.7%; Pred. No. 1.1e-158;
Matches 313; Conservative 1; Mismatches 0;
                       FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Mohan-Peterson, Sheela
REGISTRATION NUMBER: 41,201
REFERENCE/DOCKET NUMBER: PF-0458 US
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE DESCRIPTION: SEQ ID NO: 3 :
APPLICATION NUMBER: 09/659,151
                                                                                                                                                                   TELEPHONE: 650-855-0555
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 314 amino acid
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 257, Application US/09909320 Patent No. US20020132240A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Godowski, Paul J.
Grimaldi, Christopher J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ferrara, Napoleone
Filvaroff, Ellen
Fong, Sherman
Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gurney, Austin L.
Hillan, Kenneth, J
                                                                                                                                                                                                                                                                                                                                                                                                  LIBRARY: PROSTUT03
CLONE: 789927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gerber, Hanspeter
Gerritsen, Mary E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301 FFPLLWALPLIGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301 FFPLLWALPLLGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kljavin, Ivar J.
Mather, Jennie P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Genentech, Inc.
APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Desnoyers, Luc
Eaton, Dan L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Goddard, A.
                                                                                                                                                                                                                                                                                                                                                                             IMMEDIATE SOURCE:
```

```
241 PLACNKDGLMYQIGVVSWGVGCGRPNRPGVYTNISHHPEWIQKLMAQSGMSQPDPSWPLL 300  
241 PLACNKNGLMYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61 LWDSHVCGVSLLSHRWALTAAHCPETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTPEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181 EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241 PLACNKNGLWYQIGVVSWGVGCGRPNRPGVYTNISHHPEWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 MGARGALLLALLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 314;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:

GENERAL INFORMATION:

TITLE OF INVENTION: Regulation of Human Eosinophil Seri;

TITLE OF INVENTION: Protease-1-Like Enzyme
FILE REFERENCE: 04974.00512
CURRENT APPLICATION NUMBER: US 60/212,844
PRIOR APPLICATION NUMBER: US 60/212,844
PRIOR APPLICATION NUMBER: US 60/244,171
PRIOR FILING DATE: 2000-06-21
PRIOR FILING DATE: 2000-06-10
PRIOR PRIOR PRICATION NUMBER: US 60/279,766
PRIOR FILING DATE: 2001-03-30
PRIOR APPLICATION NUMBER: US 60/279,766
PRIOR FILING DATE: 2001-06-20
NUMBER OF SEQ ID NOS: S8
SOFTWARE: FASTESEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99.7%; Score 1723; DB 9;
99.7%; Pred. No. 1.1e-158;
iive 1; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 257, Application US/09909088B Patent No. US20020146709A1
GENERAL INPORMATION:
APPLICANT: Genentech, Inc.
APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
                                                                                                                                                                                                                                                                                US-09-885-441-14
; Sequence 14, Application US/09885441
; Patent No. US20020146407A1
; GENERAL INFORWATION:
                                                                                                               FFPLLWALPLIGPV 314
                                                                                                                                                                 301 FFPLLWALPLLGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301 FFPLLWALPLLGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 99.7
Matches 313; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 5
US-09-909-088B-257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-885-441-14
                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                 셤
                                                                                                            ઠ
                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                              APPLICANT: Stewart, Times, Daniell, APPLICANT: Thums Daniell, Mickey APPLICANT: Thums Daniell, Mickey APPLICANT: Thums Daniell, Mickey APPLICANT: Thums Daniell, Mickey APPLICANT: Wood, Milliam, I.

ITILE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acide Encoding the Same CHERRY Filliam, I.

TITLE OF INVENTION: Acide Encoding the Same CHERRY Filliam II and Minner: US 60/14.

PRICE REPRENCE: 1046-14

PRICE REPRENCE: 1099-00-22

PRICE PLING DATE: 1999-00-22

PRICE FLING DATE: 1999-00-22

PRICE PLING DATE: 1999-00-26

PRICE PLING DATE: 1999-00-36

PRICE PLING DATE: 1999-10-05

PRICE PRICE DATE: 1999-10-05

PRICE PLING DA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EDEALPSPHTLQEVQVAIINNSMCNHLFLKVSFRKDIFGDMVCAGNAQGGKDACFGDSGG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 MGARGALLLALARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 MGARGALLLALLLARAGLRKPESOEAAPLSGPCGRRVITSRIVGGEDAELGRWPWOGSLR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 314;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99.7%; Score 1723; DB 9;
99.7%; Pred. No. 1.1e-158;
tive 1; Mismatches 0;
an, James
aoni, Nicholas F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 99.7
Matches 313; Conservative
```

셤

ઠે

δ 윱 δ 셤 Š

```
Sequence 257, Application US/09905291A Patent No. US20020160374A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Godowski, Paul J.
Grimaldi, Christopher J.
Gurney, Austin L.
Hillan, Kenneth, J.
Kljavin, Ivar J.
Mather, Jennie P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Williams, P. Mickey Wood, William, I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Fong, Sherman
Gao, Wei-Qiang
Gerber, Hanspeter
Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Stewart, Timothy A. Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ferrara, Napoleone
Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pan, James
Paoni, Nicholas F.
Roy, Margaret Ann
                                                                                                                                                                                                                                                                                                                                                                                 301 FFPLLWALPLIGPY 314
                                                                                                                                                                                                                                                                                                                                                                                                                     301 FFPLLWALPLIGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Genentech, Inc.
APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eaton, Dan L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Goddard, A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JS-09-905-291A-257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT
                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                     셤
                                                                                                                                          ò
                                                                                                                                                                                 셤
                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acids Encoding the Same FILE REFERENCE: 10466-14

CURRENT APPLICATION NUMBER: US/09/909,08BB

CURRENT FILING DATE: 2001-07-18

PRIOR APPLICATION NUMBER: PCT/US00/04414

PRIOR APPLICATION NUMBER: PCT/US00/04414

PRIOR APPLICATION NUMBER: US 60/143,048

PRIOR FILING DATE: 1999-07-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 99.7%; Score 1723; DB 9; Length 314; Best Local Similarity 99.7%; Pred. No. 1.1e-158; Matches 313; Conservative 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: PCT/US99/30095
PRIOR FILING DATE: 1999-12-16
PRIOR FILING DATE: 1999-12-20
PRIOR APPLICATION NUMBER: PCT/US99/30910
PRIOR PILING DATE: 1999-12-20
PRIOR FILING DATE: 1999-12-20
PRIOR FILING DATE: 2000-01-05
NUMBER OF SEQ ID NOS: 423
LENGTH: 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR FILING DATE: 1999-07-26
PRIOR APPLICATION NUMBER: US 60/146,222
PRIOR PILING DATE: 1999-07-28
PRIOR FILING DATE: 1999-07-28
PRIOR FILING DATE: 1999-07-28
PRIOR FILING DATE: 1999-09-08
PRIOR PILING DATE: 1999-09-13
PRIOR PILING DATE: 1999-09-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR FILING DATE: 1999-12-02
PRIOR APPLICATION NUMBER: PC1/US99/28565
PRIOR FILING DATE: 1999-10-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: PCT/US99/21547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1999-09-15
APPLICATION NUMBER: PCT/US99/23089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 1999-10-05
APPLICATION NUMBER: PCT/US99/28214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: PCT/US99/28313
FILING DATE: 1999-11-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: PCT/US99/28564
FILING DATE: 1999-12-02
                                                                                                                                                                                 Godowski, Paul J.
Grimaldi, Christopher J.
                                                                                                                                                                                                                                                                                                                 Paoni, Nicholas F.
Roy, Margaret Ann
Stewart, Timothy A.
Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                   Williams, P. Mickey Wood, William, I.
                                                                                                                                                                                                                                              Kenneth, J
                                          errara, Napoleone
ilvaroff, Ellen
                                                                                                     Sao, Wei-Qiang
Gerber, Hanspeter
                                                                                                                                              Jerritsen, Mary E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1999-11-29
                                                                                                                                                                                                                                                                   Cljavin, Ivar J.
father, Jennie P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1999-09-15
                                                                                                                                                                                                                              Surney, Austin L.
                                                                                                                                                                   oddard, A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT
CRGANISM: Homo Sapien
US-09-909-088B-257
                                                                                                                                                                                                                                                                                                           James
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LING DATE:
```

```
240
                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                              241 PLACNKNGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDDSWPLL 300
                                                                                                                       121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                     241 PLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFFWIQKLMAQSGMSQPDPSWPLL
                                                                                                                                                                                                                                                                                                   181 EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                                           181 EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic IIILE OF INVENTION: Acids Encoding the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/09/905,291A
CURRENT APPLICATION NUMBER: US/09/905,291A
CURRENT FILING DATE: 2001-07-12
PRIOR APPLICATION NUMBER: PCT/US00/04414
PRIOR FILING DATE: 1999-07-07
PRIOR APPLICATION NUMBER: US 60/143,048
PRIOR PILING DATE: 1999-07-26
PRIOR PILING DATE: 1999-07-26
PRIOR PILING DATE: 1999-07-26
PRIOR APPLICATION NUMBER: US 60/146,222
PRIOR APPLICATION NUMBER: PCT/US99/20594
PRIOR PILING DATE: 1999-07-28
PRIOR APPLICATION NUMBER: PCT/US99/20594
PRIOR PILING DATE: 1999-09-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 1999-09-13
APPLICATION NUMBER: PCT/US99/21090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 1999-09-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
PRIOR
PRIOR
```

```
APPLICANT: Wood, WILLIAGM, 1.

TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acids Encoding the Same PLICATION NUMBER: US/09/66,350
PRIOR PELICATION NUMBER: US/09/66,350
PRIOR PELICATION NUMBER: US/09/66,350
PRIOR PELING DATE: 1099-07-07
PRIOR PELING DATE: 1099-07-07
PRIOR PELING DATE: 1999-07-07
PRIOR PELING DATE: 1999-07-07
PRIOR PELING DATE: 1999-09-18
PRIOR PELING DATE: 1999-09-15
PRIOR PELING DATE: 1999-10-29
PRIOR PELING DATE: 1999-10-20
PRIOR PELING DATE: 1999-10-20
PRIOR PELING DATE: 1999-10-20
PRIOR PELING DATE: 1999-10-30
PRIOR PELING DATE: 1999-12-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWWVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 1723; DB 9;
Pred. No. 1.1e-158;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pred. No. 1.16
1; Mismatches
                                                                                                                                                                                                                                                                                                                                          Williams, P. Mickey Wood, William, I.
                                                                                                                                                                                                                                                Roy, Margaret Ann
Stewart, Timothy A.
Tumas, Daniel
                                                                                                                                                                                                                  Paoni, Nicholas F
                                                                                                                    Kljavin, Ivar J.
Mather, Jennie P.
Pan, James
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 99.7
Matches 313; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-902-853-257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241 PLACNKOGLWYQIGVVSWGVGCGRPNRPGVTTNISHHFEWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241 PLACNKNGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 MGARGALILALILARAGLKKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99.7%; Score 1723; DB 9; Length 314; 99.7%; Pred. No. 1.1e-158;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1; Mismatches
                                                                                                           PRIOR FILING DATE: 1999-10-05
PRIOR PELING DATE: 1999-11-29
PRIOR APPLICATION NUMBER: PCT/US99/28214
PRIOR APPLICATION NUMBER: PCT/US99/28313
PRIOR APPLICATION NUMBER: PCT/US99/28564
PRIOR FILING DATE: 1999-12-02
PRIOR APPLICATION NUMBER: PCT/US99/28565
PRIOR PLILING DATE: 1999-12-02
PRIOR PLILING DATE: 1999-12-02
PRIOR PLILING DATE: 1999-12-16
PRIOR PLILING DATE: 1999-12-16
PRIOR PLILING DATE: 1999-12-20
PRIOR PELING DATE: 1999-12-20
APPLICATION NUMBER: PCT/US99/21547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Application US/09902853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Perrara, Napoleone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Fong, Sherman
Gao, Wei-Qiang
Gerber, Hanspeter
                                                                                              LING DATE: 1999-10-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gerritsen, Mary
Goddard, A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Genentech, Inc.
APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 99.7
Matches 313; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Desnoyers, Luc
Eaton, Dan L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS: 423
SEQ ID NO 257
LENGTH: 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
ORGANISM: Homo Sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 257, Applic
Publication No. US20
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-905-291A-257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
```

∂

```
Desnoyers, Luc
Eaton, Dan L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Fong, Sherman
Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Goddard, A.
                                                                                                                                                                                                                                                                                                                                  j. LENGTH: 314j. TYPE: PRTj. ORGANISM: Homo SapienUS-09-907-824-257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANI: Tunas, Daniel
APPLICANT: Tunas, Daniel
APPLICANT: Tunas, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, Williams, I.
ITILE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
FILE REFRENCE: 10466-14
CURRENT APPLICATION NUMBER: US/09/907,824
CURRENT APPLICATION NUMBER: US/065,350
PRIOR APPLICATION NUMBER: PCT/US00/04414
PRIOR FILING DATE: 2000-09-18
PRIOR FILING DATE: 1999-00-07
PRIOR PILING DATE: 1999-07-07
PRIOR PILING DATE: 1999-09-08
PRIOR FILING DATE: 1999-09-08
PRIOR FILING DATE: 1999-09-01
PRIOR FILING DATE: 1999-09-13
PRIOR FILING DATE: 1999-09-13
PRIOR PILING DATE: 1999-09-13
PRIOR PILING DATE: 1999-09-15
PRIOR PILING DATE: 1999-09-15
PRIOR PILING DATE: 1999-09-15
PRIOR FILING DATE: 1999-09-16
PRIOR FILING DATE: 1999-09-16
PRIOR FILING DATE: 1999-09-16
PRIOR FILING DATE: 1999-09-16
                                                                  181 EDEALPSPHTLOEVQVAIINNSMCHHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG 240
                                                                                                                                                      241 PLACNRNGLMYQIGVVSWGVGCGRPNRPGVYTNISHHPEWIQKLMAQSGMSQPDPSWPLL 300
121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                241 PLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLL 300
                                             EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1999-11-29
APPLICATION NUMBER: PCT/US99/28313
                                                                                                                                                                                                                                                                                                                                                                         Sequence 257, Application US/09907824
Publication No. US20020197671A1
GENERAL INFORMATION:
APPLICANT: Genentech, Inc.
APPLICANT: Ashkenati, Avi
APPLICANT: Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Godowski, Paul J.
Grimaldi, Christopher J.
Gurney, Austin L.
Hillan, Kenneth, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Roy, Margaret Ann
Stewart, Timothy A.
Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ferrara, Napoleone
Filvaroff, Ellen
Fong, Sherman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Paoni, Nicholas F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gerber, Hanspeter
Gerritsen, Mary E.
                                                                                                                                                                                                                      301 FFPLLWALPLLGPV 314
                                                                                                                                                                                                                                             Kljavin, Ivar J.
Mather, Jennie P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Desnoyers, Luc
Eaton, Dan L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Goddard, A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pan, James
                                             181
                                                                                    유
                                                                                                                                                                  셤
                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                           셤
                                         ò
                                                                                                                             8
```

```
241 PLACNKNGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61 LWDSHVCGVSLLSHRWALTAAHCFETYSDISDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 LWDSHVCGVSLLSHRWALTAAHCPETYSDLSDPSGWYVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFFWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 MGARGALLLALLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 MGARGALILALIARAGIRKPESQEAAPISGPCGRRVITSRIVGGEDAELGRWFWQGSLR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 314;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99.7%; Score 1723; DB 9;
99.7%; Pred. No. 1.1e-158;
tive 1; Mismatches 0;
PRIOR FILING DATE: 1999-11-30
PRIOR APPLICATION NUMBER: PCT/US99/28564
PRIOR FILING DATE: 1999-12-02
PRIOR FILING DATE: 1999-12-02
PRIOR PILING DATE: 1999-12-02
PRIOR PILING DATE: 1999-12-02
PRIOR PILING DATE: 1999-12-16
PRIOR PILING DATE: 1999-12-16
PRIOR PILING DATE: 1999-12-20
PRIOR PILING DATE: 1999-12-30
PRIOR PILING DATE: 1999-12-30
PRIOR PILING DATE: 1999-12-30
PRIOR PILING DATE: 2000-01-05
NUMBER OF SEQ ID NOS: 423
SEQ ID NO 257
LENGTH: 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 257, Application US/09907841 Publication No. US20020198366A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Godowski, Paul J.
Grimaldi, Christopher J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ferrara, Napoleone
Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gurney, Austin L.
Hillan, Kenneth, J
Kljavin, Ivar J.
Mather, Jennie P.
Pan, James
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gerber, Hanspeter
Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 99.7'
Matches 313; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Genentech, Inc.
APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
```

```
PLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFFWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241 PLACNKNGLMYQ1GVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 IMDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EDEALPSPHTLOEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGUSGG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 MGARGALLIALALARAGIRKPESQEAAPLSGPCGRRVITSRIVGGBDAELGRWPWQGSLR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR 60
                                                                                             APPLICANT: Tumas, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: 10466-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Remaining Prior Application data removed - See File Wrapper or PALM. NUMBER OF SEQ ID NOS: 423
SEQ ID NO 257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 99.7%; Score 1723; DB 9; Length 314; Best Local Similarity 99.7%; Pred. No. 1.1e-158; Matches 313; Conservative 1; Mismatches 0; Indels C
                                                                                                                                                                                                                                                 TITLE REPERENCE: 10466-14

CURRENT APPLICATION NUMBER: US/09/907,841

CURRENT PILING.DATE: 2001-11-20

PRIOR PLING.DATE: 2000-02-22

PRIOR PILING DATE: 1999-07-07

PRIOR PILING DATE: 1999-07-07

PRIOR APPLICATION NUMBER: US 60/145,698

PRIOR APPLICATION NUMBER: US 60/145,698

PRIOR APPLICATION NUMBER: US 60/146,222

PRIOR PILING DATE: 1999-07-26

PRIOR PILING DATE: 1999-07-28

PRIOR PILING DATE: 1999-07-28

PRIOR PILING DATE: 1999-07-28

PRIOR PILING DATE: 1999-09-18

PRIOR PILING DATE: 1999-09-13

PRIOR PILING DATE: 1999-09-13

PRIOR PILING DATE: 1999-09-15

PRIOR PILING DATE: 1999-09-15
                                  loy, Margaret Ann
Stewart, Timothy A.
Tumas, Daniel
Paoni, Nicholas F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301 FFPLLWALPLLGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301 FFPLLWALPLIGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT
CRGANISM: Homo Sapien
US-09-907-841-257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
```

US-09-904-011-257 ; Sequence 257, Application US/09904011 ; Publication No. US20030003530A1 ; GENERAL INFORMATION:

```
APPLICANT BOEROEEL, Navi
APPLICANT BOEROEEL, David
APPLICANT BOEROEEL, Luc
APPLICANT BATON DAIL.
APPLICANT BATON. DAIL.
APPLICANT BATON. DAIL.
APPLICANT GETIER. Hangeer
APPLICANT GETIER. HANGE.
APPLICANT FORMAN MILLS. TOTAL J.
APPLICANT FORMAN MILLS. J.
APPLICANT MORE SECONDAL APPLICANT MILLS. J.
APPLICANT MORE SECONDAL APPLICANT MILLS. J.
APPLICANT MIL
```

ö

Gaps

ö

```
61 IMDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                              61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                         VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                     121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCRVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                  241 PLACNKNGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQXLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                 EDEAL PSPHTLOEVOVAI INNSMCNHLFLKYSFRKDI FGDMVCAGNAOGGKDACFGDSGG
                                                                                                           1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                          EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                                                                                                                                                                                                                        PLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFFWIQKLMAQSGMSQPDPSWPLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
                                                                                     1 MGARGALLLALLLARAGIRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
    Length 314;
                                           Indels
  99.7%; Score 1723; DB 10; 99.7%; Pred. No. 1.1e-158;
                                           1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILE REFERENCE: 10466-14
CURRENT APPLICATION NUMBER: US/09/908,093
CURRENT FILING DATE: 2001-07-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 2000-09-18
APPLICATION NUMBER: PCT/US00/04414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR FILING DATE: 2000-09-18
PRIOR APPLICATION NUMBER: PCT/US00/04414
PRIOR FILING DATE: 2000-02-22
PRIOR APPLICATION NUMBER: US 60/143,048
PRIOR FILING DATE: 1999-07-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: US 60/145,698
PRIOR FILING DATE: 1999-07-26
PRIOR APPLICATION NUMBER: US 60/146,222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 257, Application US/09908093
Publication No. US20030017498A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Godowski, Paul J.
Grimaldi, Christopher J.
Gurney, Austin L.
Hillan, Kenneth, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 09/665,350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Kljavin, Ivar J.
Mather, Jennie P.
Pan, James
Paoni, Nicholas F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Roy, Margaret Ann
Stewart, Timothy A.
Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ferrara, Napoleone
Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gerber, Hanspeter
Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301 FFPLLWALPLLGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ashkenazi, Avi
Botstein, David
                        Best Local Similarity 99.7 Matches 313; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Desnoyers, Luc
Eaton, Dan L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Fong, Sherman
Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Goddard,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JS-09-908-093-257
                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT
                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                엄
                                                                                                                                                                        ò
                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                             ଚ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                             ö
                                                                                                                                                                                                61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                   EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG 240
                                                                                                                                                                                                                                                                                                                                                                  EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                241 PLACNRNGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLWAQSGWSQPDPSWPLL 300
                                                                                                                                                                      61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                      121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                        PLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQXLMAQSGMSQPDPSWPLL 300
                                                                                                                              9
                                                                                                             1 MGARGALILALILARAGIRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                     1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
                                             Gaps
                                             ö
99.7%; Score 1723; DB 10; Length 314; 99.7%; Pred. No. 1.1e-158; ive 1; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILE REFERENCE: 10466-14
CURRENT APPLICATION NUMBER: US/09/903,640
CURRENT FILING DATE: 2001-07-11
PRIOR APPLICATION NUMBER: 09/665,350
PRIOR FILING DATE: 2000-09-18
NUMBER OF SEQ ID NOS: 423
SEQ ID NO 257
LENGTH: 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Application US/09903640
o. US20030017463A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Godowski, Paul J.
Grimaldi, Christopher J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ferrara, Napoleone
Filvaroff, Ellen
Fong, Sherman
Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Roy, Margaret Ann
Stewart, Timothy A.
Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gurney, Austin L. Hillan, Kenneth, J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Paoni, Nicholas F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gerber, Hanspeter
Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kljavin, Ivar J.
Mather, Jennie P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FFPLLWALPLLGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Genentech, Inc.
APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
                     Best Local Similarity 99.7
Matches 313; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Desnoyers, Luc
Eaton, Dan L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Goddard, A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
CORGANISM: Homo Sapien
US-09-903-640-257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Јашев
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 257, Ap
Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 11
US-09-903-640-257
                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
APPLICANT:
  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                        셤
                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
```

```
MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 1723; DB 10;
Pred. No. 1.1e-158;
1; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILE REFERENCE: 1046-14

CURRENT PAPLICATION NUMBER: US/09/906,742

CURRENT FILING DATE: 2001-07-16

PRIOR APPLICATION NUMBER: US/665,350

PRIOR PILING DATE: 2000-09-18

PRIOR PILING DATE: 2000-09-18

PRIOR PILING DATE: 1090-07-2

PRIOR PELING DATE: 1999-07-07

PRIOR PILING DATE: 1999-07-07

PRIOR PILING DATE: 1999-07-26

PRIOR PILING DATE: 1999-07-26

PRIOR PILING DATE: 1999-07-26

PRIOR PILING DATE: 1999-07-26

PRIOR PILING DATE: 1999-09-08

PRIOR PILING DATE: 1999-09-08

PRIOR PILING DATE: 1999-09-08

PRIOR PILING DATE: 1999-09-13

PRIOR PILING DATE: 1999-09-15

PRIOR PILING DATE: 1999-09-15

PRIOR PILING DATE: 1999-09-15

PRIOR PILING DATE: 1999-09-15

PRIOR PILING DATE: 1999-10-05

PRIOR PILING DATE: 1999-10-05

PRIOR PILING DATE: 1999-11-29

PRIOR PILING DATE: 1999-12-02

PRIOR PILING DATE: 1999-12-03

PRIOR PILING DATE: 1999-13-03

PRIOR PILING DATE: 1999-13-03

PRIOR PILING DATE
                                                                                                                                                                                                                                                                                       Godowski, Paul J.
Grimaldi, Christopher J.
                                                                                                                                                                                                                                                                                                                                                                  Gurney, Austin L.
Hillan, Kenneth, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Roy, Margaret Ann
Stewart, Timothy A.
Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 99.7%;
Matches 313; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pan, James
Paoni, Nicholas F.
                                                                                                                                                                             Gerber, Hanspeter
Gerritsen, Mary E
                                                                                                                                                                                                                                                                                                                                                                                                                                            Kljavin, Ivar J. Mather, Jennie P
                                                                                                                                     Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILE REFERENCE: 10466-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTPEFENRTDCWVTGWdYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181 EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241 PLACNKNGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFFWIQKLMAQSGWSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWNVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241 PLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 MGARGALLIALLLARAGIRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 MGARGALLLALLIARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 314;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 1723; DB 10;
Pred. No. 1.1e-158;
1; Mismatches 0;
PRIOR FILING DATE: 1999-07-28
PRIOR APPLICATION NUMBER: PCT/US99/20594
PRIOR PLING DATE: 1999-09-08
PRIOR PLING DATE: 1999-09-08
PRIOR FILING DATE: 1999-09-13
PRIOR FILING DATE: 1999-09-15
PRIOR PLING DATE: 1999-10-15
PRIOR PLING DATE: 1999-10-05
PRIOR PLING DATE: 1999-11-29
PRIOR PLING DATE: 1999-12-02
PRIOR PLING DATE: 1999-12-02
PRIOR PLING DATE: 1999-12-02
PRIOR PLING DATE: 1999-12-02
PRIOR PLING DATE: 1999-12-05
PRIOR PLING DATE: 1999-12-06
PRIOR PLING DATE: 1999-12-06
PRIOR PLING DATE: 1999-12-06
PRIOR PLING DATE: 1999-12-07
PRIOR PLING DATE: 1999-12-06
PRIOR PLING DATE: 1999-12-07
PRIOR PLING DATE: 1999-12-07
PRIOR PLING DATE: 1999-12-20
PRIOR PLING DATE: 1999-12-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 257, Application US/09906742
Publication No. US20030023054A1
GENERAL INFORMATION:
APPLICANT: Genentech, Inc.;
APPLICANT: Ashkenazi, Avi
APPLICANT: Besteein, David
APPLICANT: Besteein, David
APPLICANT: Besteein, David
APPLICANT: Baton, Dan L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 99.7%;
Best Local Similarity 99.7%;
Matches 313; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FFPLLWALPLLGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CRGANISM: Homo Sapien
US-09-908-093-257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-906-742-257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
```

셤 ઠે ò

```
Gerber, Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-907-613-257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                               241 PLACNXDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFFWIQKLMAQSGMSQPDPSWPLL 300
                                                                             61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWNVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                         241 PLACNKNGLWYQIGVVSWGVGCGRPNRPGVYTNISHHPEWIQKLMAQSGMSQPDPSWPLL 300
                                                          120
                                                                                                                                  121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                           181 EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG 240
and Transmembrane Polypeptides and Nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Transmembras
TITLE OF INVENTION: Acids Encoding the Same
FILE REPERENCE: 10466-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/906,838
CURRENT FILING DATE: 2001-07-16
PRIOR APPLICATION NUMBER: 09/665,350
PRIOR FILING DATE: 2000-09-18
PRIOR FILING DATE: 2000-02-22
PRIOR PLICATION NUMBER: PCT/US00/0414
PRIOR PLILING DATE: 1999-07-07
PRIOR APPLICATION NUMBER: US 60/145,698
PRIOR PLILING DATE: 1999-07-26
PRIOR FILING DATE: 1999-07-26
PRIOR FILING DATE: 1999-07-26
PRIOR FILING DATE: 1999-07-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: PCT/US99/20594
PRIOR FILING DATE: 1999-09-08
PRIOR APPLICATION NUMBER: PCT/US99/20944
PRIOR FILING DATE: 1999-09-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 257, Application US/09906838
Publication No. US20030027143A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Goddard, A.
Godowski, Paul J.
Grimaldi, Christopher J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gurney, Austin L.
Hillan, Kenneth, J.
Kljavin, Ivar J.
Mather, Jennie P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ferrara, Napoleone
Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pan, James
Paoni, Nicholas F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gao, Wei-Qiang
Gerber, Hanspeter
Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Roy, Margaret Ann
                                                                                                                                                                                                                                                                                                                                                           301 FFPLLWALPLLGPV 314
                                                                                                                                                                                                                                                                                                                                                                                            301 FFPLLWALPLIGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ashkenazi, Avi
Botstein, David
Desnoyers, Luc
Eaton, Dan L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pong, Sherman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JS-09-906-838-257
                                                                                                                                                                                                                                              181
                                                                                           g
                                                                                                                                à
                                                                                                                                                                 g
                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                    용
                                                                                                                                                                                                                                                                                                                                                           ò
```

```
121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241 PLACNKNGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFFWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 LMDSHVCGVSLLSHRWALTAAHCPETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 MGARGALILIALILIARAGIRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 314;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 1723; DB 10;
Pred. No. 1.1e-158;
1; Mismatches 0;
PRIOR APPLICATION NUMBER: PCT/US99/21090
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/21547
PRIOR APPLICATION NUMBER: PCT/US99/21547
PRIOR FILING DATE: 1999-10-05
PRIOR FILING DATE: 1999-10-05
PRIOR FILING DATE: 1999-10-05
PRIOR FILING DATE: 1999-11-29
PRIOR FILING DATE: 1999-11-30
PRIOR FILING DATE: 1999-11-30
PRIOR FILING DATE: 1999-11-30
PRIOR FILING DATE: 1999-12-02
PRIOR PLING DATE: 1999-12-02
PRIOR PLING DATE: 1999-12-02
PRIOR PLING DATE: 1999-12-03
PRIOR FILING DATE: 1999-12-04
PRIOR FILING DATE: 1999-12-04
PRIOR FILING DATE: 1999-12-06
PRIOR FILING DATE: 1999-12-06
PRIOR FILING DATE: 1999-12-06
PRIOR FILING DATE: 1999-12-07
PRIOR PLING DATE: 1999-12-07
PRIOR FILING DATE: 2090-07
PRIOR PLING DATE: 2000-01-05
PRIOR PLING DATE: 2000-01-05
PRIOR PRILING DATE: 2000-01-05
PRIOR PLING DATE: 2000-01-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 257, Application US/09907613 Publication No. US20030027145A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ferrara, Napoleone
Filvaroff, Ellen
Fong, Sherman
Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FFPLLWALPLLGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FFPLLWALPLIGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Genentech, Inc.
APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
APPLICANT: Eaton, Dan L.
APPLICANT: Ferrara, Napoleon
APPLICANT: Fivaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 99.7
Matches 313; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-906-838-257
```

```
1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR 60
                                                                                                                                                                                                                                                                                                                                        APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 99.7%; Score 1723; DB 10; Length 314; Best Local Similarity 99.7%; Pred. No. 1.1e-158; Matches 313; Conservative 1; Mismatches 0; Indels 0.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR FILING DATE: 1999-12-02
PRIOR APPLICATION NUMBER: PCT/US99/28565
PRIOR PILING DATE: 1999-12-02
PRIOR PLING DATE: 1999-12-02
PRIOR FILING DATE: 1999-12-16
PRIOR PILING DATE: 1999-12-16
PRIOR APPLICATION NUMBER: PCT/US99/30911
PRIOR PILING DATE: 1999-12-20
PRIOR PILING DATE: 1999-12-20
PRIOR PILING DATE: 1999-12-20
PRIOR FILING DATE: 2000-01-05
NUMBER: PCT/US00/00219
PRIOR FILING DATE: 2000-01-05
NUMBER OF SEQ ID NOS: 423
LENGTH: 314
                                                                                                                                                                                                                                                                                                                                                                                                                                           FILE REFERENCE: 10466-14
CURRENT APPLICATION NUMBER: US/09/907,613
CURRENT FILING DATE: 2001-07-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT FILING DATE: 2001-07-17
PRIOR APPLICATION NUMBER: PCT/US00/04414
PRIOR PILING DATE: 2000-02-22
PRIOR APPLICATION NUMBER: US 60/143,048
PRIOR FILING DATE: 1999-07-07
PRIOR APPLICATION NUMBER: US 60/145,698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 60/146,222
FILING DATE: 1999-07-26
APPLICATION NUMBER: PCT/US99/20594
FILING DATE: 1999-09-08
APPLICATION NUMBER: PCT/US99/20594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR FILING DATE: 1999-11-29
PRIOR APPLICATION NUMBER: PCT/US99/28313
PRIOR FILING DATE: 1999-11-30
PRIOR APPLICATION NUMBER: PCT/US99/28564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: PCT/US99/21547
FILING DATE: 1999-09-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: PCT/US99/23089
FILING DATE: 1999-10-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: PCT/US99/28214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: PCT/US99/21090
                                                                                                                                                                                                                                                                toy, Margaret Ann Stewart, Timothy A. Umas, Daniel
                                                                                                   urney, Austin L.
illan, Kenneth, J
                                                                                                                                                                                                                                     aoni, Nicholas F.
Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LING DATE: 1999-09-13
                                                                                                                                                             Kljavin, Ivar J.
Mather, Jennie P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       999-09-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-907-613-257
                                                                                                                                                                                                                 James
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
```

61

8 8

1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR 60

```
181 EDEALPSPHTLQEVQVAIINNSMCHHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG 240
                                                                                                                                                                241 PLACNROGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGWSQPDPSWFLL 300
                 240
                                                                                                                                             241 PLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLL 300
121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                      EDBALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                    301 FFPLLWALPLLGPV 314
                                                                                                                                                                                                                                                  301 FFPLLWALPLLGPV 314
                                                                      181
                                                                                                 셤
                                                                                                                                                                           g
                                셤
                                                                      ò
                                                                                                                                             ò
                                                                                                                                                                                                                    δ
```

Search completed: February 27, 2005, 20:39:49 Job time : 90.2843 secs

(oldzu) Anold agod aint

Appli Appli

Sequence Sequence Sequence Sequence Sequence Sequence Sequence

Sequence Sequence Sequence Sequence Sequence

Sequence:

Run on:

Searched:

Database

Result No. Appli Appli

Sequence Sequence Sequence Sequence

```
ø
Sun Mar
```

7,

```
Sequence 6, Application US/09023942A

Sequence 6, Application US/09023942A

Berent No. 6479274

GENERAL INFORMATION:

APPLICANT: (US only) ANTALIS Toni Marie and HOOPER John David
TITLE OF INVENTION: NOVEL MOLECULES

NUMBER OF SEQUENCES: 30

CORRESPONDENCE ADDRESS:

CORRESPONDENCE ADDRESS:

STREET: 400 GARDEN CITY PLAZA
CITY: GARDEN CITY
STATE: NEW YORK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; Score 1728; DB 4; Length 314;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTER LISTO
COMPUTER TEADABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Ploppy disk
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/023,942A
FILING DATE: 13-FEB-1998
CLASSIPICATION DATA:
APPLICATION NUMBER: PO5101/97
FILING DATE: 13-FEB-1997
FILING DATE: 13-FEB-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PP0422/97
FILING DATE: 13-FEB-1997
APPLICATION NUMBER: International PCT Application
FILING DATE: 13-FEB-1998
ATTORNEY/AGENT INFORMATION:
NAME: DIGIGLIO, FRANK S
RECIENTATION NUMBER: 31,346
REFERENCE/DOCKET NUMBER: 11168
TELECOMMUNICATION INFORMATION:
                             US-08-978-4048-8
US-08-978-4048-6
US-09-018-4048-6
US-09-366-21-8
US-09-366-29-8
US-09-366-29-8
US-08-978-4048-1
US-08-978-4048-3
US-08-681-151-3
US-08-978-4048-3
US-09-016-366A-21
US-08-978-4048-3
US-09-016-366A-21
US-09-017-661-2
US-10-177-661-2
US-10-177-661-2
                                                                                                                                                                                                                                                                US-09-016-366A-23
                                                                                                                                                                                                                                                                                                                                 ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELBEAK: (516) 742 4366
TELERA: (516) 901 SANS UR
INFORMATION FOR SEQ ID NO: (SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     : 314 amino acids amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE: protein US-09-023-942A-6
TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                   US-09-023-942A-6
536.5
533.5
511.5
511.5
511.5
511.5
510.5
510.5
510.5
510.5
510.5
500.5
508.5
508.5
508.5
508.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
 Sequence 3, Appli
Sequence 257, App
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   66, Appl
9, Appli
11, Appl
12, Appl
7, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 6, Appli
                                                                                                             February 27, 2005, 20:12:15; Search time 30.0958 Seconds (without alignments) 778.839 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed and is derived by analysis of the total score distribution.
                                                                                                                                                                              US-10-040-647-6
1728
1 MGARGALLLALLARAGIRK......PSWPLLFFPLLWALPLLGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence Sequence Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence Sequence S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                 513545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /cgn2 6/ptodata/1/iaa/5A COWB.pep:*
/cgn2 6/ptodata/1/iaa/5B COWB.pep:*
/cgn2 6/ptodata/1/iaa/6A COWB.pep:*
/cgn2 6/ptodata/1/iaa/6B COWB.pep:*
/cgn2 6/ptodata/1/iaa/PCTUS COWB.pep:*
/cgn2 6/ptodata/1/iaa/PCTUS COWB.pep:*
                 5.1.6
Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-023-942A-6
US-09-008-271A-3
US-09-907-72A-257
US-09-905-125A-257
US-09-906-775A-257
US-09-906-700-257
US-09-903-607-257
US-09-903-607-257
US-09-903-604-257
US-09-903-604-257
US-09-903-942A-4
US-09-023-942A-4
US-09-023-942A-4
US-09-023-942A-4
US-09-023-942A-4
US-09-023-942A-4
US-09-386-653A-7
US-09-386-653A-7
US-09-386-653A-9
US-09-386-642-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-902-775A-263
US-09-906-700-263
US-09-903-603A-263
US-09-904-920A-263
US-09-909-064-263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-905-125A-263
US-09-902-775A-263
US-09-906-700-263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -09-907-794A-263
                                                                                                                                                                                                                                                                                                                                 Potal number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                   513545 segs, 74649064 residues
                 GenCore version
Copyright (c) 1993 - 2005
                                                                                                                                                                                                                                                                                                                                                                                                                Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                OM protein - protein search, using sw model
                                                                                                                                                                                                                                                 BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Issued Patents AA:*
                                                                                                                                                                                                                                                                                                                                                                Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query
Match Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Title:
Perfect score:
                                                                                                                                                                                                                                                   Scoring table:
```

```
IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT
                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Š
                     ö
                                                                                                                                           LWDSHVCGVSLLSHRWALTAAAHCFETYSDLSDPSGWNVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                 240
                                                                                                                       61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                           VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                 PLACNYDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                   300
                                                       9
                                                                                     9
                                                                         1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                 181 EDEALPSPHTLQEVQVALINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                                                                                                                                                     241 PLACNKDGLWYQIGVVSWGVGGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLL
                                                                                                                                                                                                                                                               EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG
                                                     1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                     Gaps
                     ö
                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDIUM TYPE: Diskette
CCMPUTER: IBM Compatible
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEC for Windows Version 2.0
CURRENT APPLICATION NUMBER: US/09/008,271A
FILING DATE: 16-Jan-1998
PRIOR APPLICATION DATA:
     Pred. No. 1.1e-165;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: HUMAN PROTEASE MOLECULES
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE: Incyte Pharmaceuticals, Inc.
STREET: 3174 Porter Dr.
CITY: Palo Alto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER: PF-0458 US
                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: «Unknown»
FILING DATE: «Unknown»
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: Mohan-Peterson, Sheela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Bandman, Olga
Hillman, Jennifer L.
Yue, Henry
Guegler, Karl J.
Corley, Neil C.
Tang, Ton Y.
Shah, Purvi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REGISTRATION NUMBER: 41,201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 3, Application US/09008271A Patent No. 6203979 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEPHONE: 650-855-0555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 314 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: 650-845-4166
INFORMATION FOR SEQ ID NO: 3:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
100.08;
                                                                                                                                                                                                                                                                                                                                                                                                     301 FFPLLWALPLLGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                    301 FFPLLWALPLIGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ZIP: 94304
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: linear
                   Matches 314; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY: USA
   Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JS-09-008-271A-3
                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                         61
                                                                                                                                                                                           121
                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 2
                                                                                                                       ò
                                                                                                                                                      셤
                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                              원
                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                    à
```

```
240
                                                                                                                                                                                                                                                                                                                             61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                                                                                                             121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241 PLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFFFFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                            61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWNVQFGQLTSMPSFWSLQAYTRYF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: THILLIAN, DICKEY
APPLICANT: William, P. Mickey
APPLICANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: 10466-14
CURRENT PILING DATE: 2001-07-17
PRIOR APPLICATION NUMBER: PCT/US00/04414
PRIOR FILING DATE: 2000-02-2PRIOR PILING DATE: 2000-02-2PRIOR PILING DATE: 2000-02-2PRIOR PILING DATE: 2000-02-2PRIOR PRIOR APPLICATION NUMBER: US 60/143,048
                                                                                                                                                                                                                                                                           1 MGARGALILALLIARAGIRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181 EDEALPSPHTLOEVOVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                         1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                            Gaps
                                                                                                                                                                          ö
                                                                                                                        Length 314;
                                                                                                                                                                       Indels
                                                                                                                                                                            ö
                                                                                                                     99.7%; Score 1723; DB 3;
99.7%; Pred. No. 3.5e-165;
tive 1; Mismatches 0;
                  CLONE: 789927
SEQUENCE DESCRIPTION: SEQ ID NO: 3:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 257, Application US/09907794A Patent No. 6635468 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Godowski, Paul J.
Grimaldi, Christopher J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Paoni, Nicholas F.
Roy, Margaret Ann
Stewart, Timothy A.
Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ferrara, Napoleone
Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gerber, Hanspeter
Gerritsen, Mary E
PROSTUT03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301 FFPLLWALPLIGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301 FFPLLWALPLLGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gurney, Austin L.
Hillan, Kenneth,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Kljavin, Ivar J.
Mather, Jennie P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Genentech, Inc.
APPLICANT: Ashkenzi, Avi
APPLICANT: Botstein, David
APPLICANT: Beton, Dan L.
                                                                                                                     Query Match
Best Local Similarity 99.73
Matches 313; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Fong, Sherman
Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Goddard, A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Рап, Јашев
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-907-794A-257
                                                    ;
US-09-008-271A-3
```

```
APPLICANT: WOOG, MILLIAM, 1:

TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Enceding the Same
FILE SEPERBRICE: 10466-14

CURRENT FILING DATE: 2001-07-15

PRIOR PELICATION NUMBER: US/09/905,125A

CURRENT FILING DATE: 2000-02-2

PRIOR PELING DATE: 1099-07-07

PRIOR PELING DATE: 1099-07-07

PRIOR PELING DATE: 1999-07-07

PRIOR PELING DATE: 1999-07-07

PRIOR PELING DATE: 1999-07-07

PRIOR PELING DATE: 1999-07-07

PRIOR PELING DATE: 1999-09-08

PRIOR PELING DATE: 1999-09-09

PRIOR PELING DATE: 1999-09-09

PRIOR PELING DATE: 1999-09-09

PRIOR PELING DATE: 1999-09-01

PRIOR PELING DATE: 1999-01-13

PRIOR PELING DATE: 1999-11-30

PRIOR PELING DATE: 1999-12-02

PRIOR PELING DATE: 1999-12-03

PRIOR PELING DATE: 1999-12-04

PRIOR PELING DATE: 1999-12-04

PRIOR PELING DATE: 1999-12-04

                                                                                                                                                                                                                                                                                                                  Godowski, Paul J.
Grimaldi, Christopher J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Tumas, Daniel
Williams, P. Mickey
Wood, William, I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Roy, Margaret Ann
Stewart, Timothy A.
                                                                                            Ferrara, Napoleone
Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                 Gurney, Austin L.
Hillan, Kenneth, J
Kljavin, Ivar J.
Mather, Jennie P.
Pan, James
                                                                                                                                                       Fong, Sherman
Gao, Wei-Qiang
Gerber, Hanspeter
                                                                                                                                                                                                                                                       Gerritsen, Mary E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Paoni, Nicholas F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQ ID NOS: 423
SEQ ID NO 257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; LENGTH: 314
;; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-905-125A-257
                                                                                                                                                                                                                                                                                        Goddard,
                                                                                                                                                                                                                                                                                                                                                   APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181 EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241 PLACNYDGLWYQIGVVSWGVGCGRPNRPGVTTNISHHFFWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241 PLACNKNGLWYQIGVVSWGVGCGRPNRPGVYTNISHHPRWIQXLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 MGARGALILALLIARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 1723; DB 4; Length 314;
Pred. No. 3.5e-165;
1; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: PCT/US99/30911
PRIOR FILING DATE: 1999-12-20
PRIOR APPLICATION NUMBER: PCT/US99/30999
PRIOR PILING DATE: 1999-12-20
PRIOR PILING DATE: 1999-12-20
PRIOR FILING DATE: 2000-01-05
NUMBER OF SEQ ID NOS: 423
SEQ ID NO 257
LENGTH: 314
                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1999-10-05
APPLICATION NUMBER: PCT/US99/28214
FILING DATE: 1999-11-29
APPLICATION NUMBER: PCT/US99/28313
FILING DATE: 1999-11-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: PCT/US99/30095
PRIOR FILING DATE: 1999-12-16
                                                                                                                   APPLICATION NUMBER: PCT/US99/20594
FILING DATE: 1999-09-08
APPLICATION NUMBER: PCT/US99/20944
                                                                                                                                                                                                                                                    APPLICATION NUMBER: PCT/US99/21090
                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: PCT/US99/23089
FILING DATE: 1999-10-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: PCT/US99/28564
FILING DATE: 1999-12-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: PCT/US99/28565
FILING DATE: 1999-12-02
                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: PCT/US99/21547
                                LING DATE: 1999-07-26
PLICATION NUMBER: US 60/146,222
60/145,698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-905-125A-257;
; Sequence 257, Application US/09905125A; Patent No. 6664376; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 99.7%;
Matches 313; Conservative
                                                                                                                                                                                                                      FILING DATE: 1999-09-13
                                                                                                                                                                                                                                                                                                                                                   1999-09-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FFPLLWALPLLGPV 314
                                                                                                                                                                                                                                                                                        1999-09-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301 PFPLLWALPLIGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-907-794A-257
                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
```

Gaps ö 99.7%; Score 1723; DB 4; Length 314; 99.7%; Pred. No. 3.5e-165; ive 1; Mismatches 0; Indels Query Match
Best Local Similarity 99.7
Matches 313; Conservative

APPLICANT: Genentech, Inc

셤

8

8

ઠ

ö

```
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: ROy, Margaret Ann
APPLICANT: Roy, Margaret Ann
APPLICANT: Stewart, Timothy A.
APPLICANT: Stewart, Timothy A.
APPLICANT: Tunas, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Williams, P. Mickey
APPLICANT: Williams, I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: 10466-14
FILE REPERENCE: 10466-14
FILE REPERENCE: 10466-14
FILE REPERENCE: 2001-02-22
CURRENT APPLICATION NUMBER: US 60/1414
FRIOR APPLICATION NUMBER: US 60/145,698
FRIOR FILING DATE: 1999-07-07
FRIOR APPLICATION NUMBER: US 60/146,222
FRIOR FILING DATE: 1999-07-08
FRIOR FILING DATE: 1999-09-08
FRIOR FILING DATE: 1999-09-08
FRIOR FILING DATE: 1999-09-08
                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                      241 PLACNKNGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGWSQPDPSWPLL 300
                                                                             LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                    61 LWDSHVCGVSLLSHRWALTAAHCPETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                             121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                 PLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLL 300
9
                                      9
                     1 MGARGALLIALLILARAGIRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                            EDBALPS PHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Godowski, Paul J.
Grimaldi, Christopher J.
Gurney, Austin L.
Hillan, Kenneth, J.
Kljavin, Ivar J.
Mather, Jennie P.
Pan, James
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 257, Application US/09902775A Patent No. 6686451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ferrara, Napoleone
Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Paoni, Nicholas F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gerber, Hanspeter
Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                301 FFPLLWALPLLGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                          FFPLLWALPLLGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: Genencech, Inc.
APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Fong, Sherman
Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Desnoyers, Luc
Eaton, Dan L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Goddard, A.
                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                             원
                                                                                                                                                           ò
                                                                                                                                                                                                    요
                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                              ð
```

```
61 LWDSHVCGVSLLSHRWALTAAHCPETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFFFFRNRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241 PLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241 PLACNRNGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181 EDEALPSPHTLOEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181 EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 314;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99.7%; Score 1723; DB 4; 99.7%; Pred. No. 3.5e-165; ive 1; Mismatches 0;
PRIOR APPLICATION NUMBER: PCT/US99/21090
PRIOR FILING DATE: 1999-09-15
PRIOR PILING DATE: 1999-09-15
PRIOR PLING DATE: 1999-09-15
PRIOR FLING DATE: 1999-09-15
PRIOR PLING DATE: 1999-10-05
PRIOR PLING DATE: 1999-11-29
PRIOR PLING DATE: 1999-11-29
PRIOR PLING DATE: 1999-11-29
PRIOR PLING DATE: 1999-11-30
PRIOR PLING DATE: 1999-11-30
PRIOR PLING DATE: 1999-11-30
PRIOR PLING DATE: 1999-11-30
PRIOR PLING DATE: 1999-11-02
PRIOR PLING DATE: 1999-12-02
PRIOR PLING DATE: 1999-12-02
PRIOR PLING DATE: 1999-12-02
PRIOR PLING DATE: 1999-12-02
PRIOR PLING DATE: 1999-12-06
PRIOR PLING DATE: 1999-12-07
PRIOR PLING DATE: 1999-12-06
PRIOR PLING DATE: 1999-13-06
PRIOR PLING DATE: 1999-12-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 257, Application US/09906700 Patent No. 6723535 Patent INCPRAZION: APPLICANT: Genentech, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Desnoyers, Luc
Eaton, Dan L.
Ferrara, Napoleone
Filvaroff, Ellen
Fong, Sherman
Gao, Wei-Qiang
Gerber, Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301 FFPLLWALPLLGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 99.7
Matches 313, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ashkenazi, Avi
Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT
CORGANISM: Homo Sapien
US-09-902-775A-257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 6
US-09-906-700-257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
```

```
PRIOR
PRIOR
PRIOR
                                                                                                                           g
                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                엄
                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                   g
                                           셤
                                                                             ઠે
                                                                                                                                                                                                                                                                                        APPLICANT: Williams, P. Mickey
APPLICANT: Williams, P. Mickey
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: 10466-14
CURRENT APPLICATION NUMBER: US/09/906,700
CURRENT PILING DATE: 2000-09-18
PRIOR APPLICATION NUMBER: PCT/US00/04414
PRIOR PILING DATE: 1999-07-07
PRIOR PILING DATE: 1999-07-26
PRIOR PILING DATE: 1999-07-26
PRIOR PILING DATE: 1999-07-28
PRIOR FILING DATE: 1999-07-28
PRIOR FILING DATE: 1999-09-08
PRIOR FILING DATE: 1999-09-08
PRIOR FILING DATE: 1999-09-08
PRIOR FILING DATE: 1999-09-13
PRIOR FILING DATE: 1999-09-13
PRIOR FILING DATE: 1999-09-13
PRIOR PILING DATE: 1999-09-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MGARGALLLALLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 1723; DB 4; Length 314;
Pred. No. 3.5e-165;
1; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE: 1999-10-05
PRIOR FILING DATE: 1999-10-05
PRIOR PILING DATE: 1999-110-05
PRIOR PILING DATE: 1999-110-09
PRIOR PILING DATE: 1999-11-30
PRIOR PILING DATE: 1999-11-30
PRIOR PILING DATE: 1999-11-30
PRIOR PILING DATE: 1999-12-02
PRIOR PILING DATE: 1999-12-03
PRIOR PILING DATE: 2000-01-05
NUMBER OF SEQ ID NOS: 423
SEQ ID NOS: 423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR FILING DATE: 1999-09-13
PRIOR FILING DATE: 1999-09-13
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/21547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/23089
                                         Godowski, Paul J.
Grimaldi, Christopher
                                                                                                                                                                                                      Paoni, Nicholas F.
Roy, Margaret Ann
Stewart, Timothy A.
Tumas, Daniel
                                                                                       Gurney, Austin L.
Hillan, Kenneth, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99.7%;
Gerritsen, Mary E.
                                                                                                                                       Kljavin, Ivar J.
Mather, Jennie P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 99.7
Matches 313; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT

ORGANISM: Homo Sapien

US-09-906-700-257
                                                                                                                                                                                       Pan, James
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠ
```

```
241 PLACNKNGLMYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLL 300
                                 121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWYTGWGYIK 180
                                                                                                                                                       181 EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG 240
                                                                                                                                                                                                               241 PLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFFWIQKLMAQSGMSQPDPSWPLL 300
121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acids Encoding the Same FILE REPERSICE: GNE.1618P2C12
CURRENT APPLICATION NUMBER: US/09/903,603A
CURRENT PILING DATE: 2001-07-11
                                                                                                         EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 1999-09-13
PPILING DATE: 1999-09-13
PLILING DATE: 1999-09-15
APPLICATION NUMBER: PCT/US99/21547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: PCT/USO0/04414
PRIOR FILING DATE: 2000-02-22
PRIOR APPLICATION NUMBER: US 60/143 049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1999-07-28
PPLICATION NUMBER: PCT/US99/20594
PILING DATE: 1999-09-08
APPLICATION NUMBER: PCT/US99/20944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 1999-09-15
APPLICATION NUMBER: PCT/US99/23089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 1999-10-05
APPLICATION NUMBER: PCT/US99/28214
FILING DATE: 1999-11-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: PCT/US99/28313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 2000-02-22
APPLICATION NUMBER: US 60/143,048
FILING DATE: 1999-07-07
APPLICATION NUMBER: US 60/145,698
FILING DATE: 1999-07-26
APPLICATION NUMBER: US 60/146,222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 257, Application US/09903603A Patent No. 6767995 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Godowski, Paul J.
Grimaldi, Christopher J.
Gurney, Austin L.
Hillan, Kenneth, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kljavin, Ivar J.
Mather, Gennie P.
Pan, James
Paoni, Nicholas F.
Roy, Margaret Ann
Stewart, Timothy A.
Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Williams, P. Mickey
Wood, William, I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ferrara, Napoleone
Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gerritsen, Mary E
                                                                                                                                                                                                                                                                                                                     301 FFPLLWALPLLGPV 314
                                                                                                                                                                                                                                                                                                                                                                 301 FFPLLWALPLIGEV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gerber, Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ashkenazi, Avi
Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Fong, Sherman
Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Desnoyers, Luc
Eaton, Dan L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Goddard, A.
                                                                                                         181
```

```
61 LMDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241 PLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 MGARGALLIALLIARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61 LMDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWWVQFGQLTSMPSFWSLQAYYTRYF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181 EDEALPSPHTLOEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWOGSLR
                                                                                                                                                                                     and Transmembrane Polypeptides and Nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 1723; DB 4;
Pred. No. 3.5e-165;
1; Mismatches 0;
                                                                                                                                                                                                                                THIRE REPERBNCE: 10466-14

CURRENT APPLICATION NUMBER: US/09/904,920A

CURRENT APPLICATION NUMBER: US/09/904,920A

CURRENT FILING DATE: 2001-07-13

PRIOR PILING DATE: 2000-02-22

PRIOR PILING DATE: 1999-07-07

PRIOR FILING DATE: 1999-07-07

PRIOR FILING DATE: 1999-07-26

PRIOR FILING DATE: 1999-07-28

PRIOR FILING DATE: 1999-07-38

PRIOR FILING DATE: 1999-09-13

PRIOR FILING DATE: 1999-09-13

PRIOR FILING DATE: 1999-09-13

PRIOR FILING DATE: 1999-09-13

PRIOR FILING DATE: 1999-09-15

PRIOR FILING DATE: 1999-09-15

PRIOR FILING DATE: 1999-09-15

PRIOR FILING DATE: 1999-10-12

PRIOR FILING DATE: 1999-10-12

PRIOR FILING DATE: 1999-11-29

PRIOR FILING DATE: 1999-11-29

PRIOR FILING DATE: 1999-11-29

PRIOR FILING DATE: 1999-11-20

PRIOR FILING DATE: 1999-11-30

PRIOR FILING DATE: 1999-12-02

PRIOR FILING DATE: 1999-12-07

PRIOR PILING DATE: 1999-12-07
                                                                                                                        APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Transmembrar
TITLE OF INVENTION: Acids Encoding the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 99.7
Matches 313; Conservative
                                                                                          Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; ORGANISM: Homo Sapien
US-09-904-920A-257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181 EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241 PLACNKNGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFFWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181 EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 1723; DB 4; Length 314;
Pred. No. 3.5e-165;
1; Mismatches 0; Indels
                                             PRIOR FILING DATE: 1999-12-02
PRIOR APPLICATION NUMBER: PCT/US99/28565
PRIOR FILING DATE: 1999-12-02
PRIOR FILING DATE: 1999-12-02
PRIOR FILING DATE: 1999-12-16
PRIOR PRIOR DATE: 1999-12-16
PRIOR APPLICATION NUMBER: PCT/US99/30991
PRIOR PILING DATE: 1999-12-20
PRIOR PELING DATE: 1999-12-20
PRIOR PELING DATE: 1999-12-20
PRIOR PILING DATE: 1999-12-20
PRIOR PILING DATE: 2000-01-05
NUMBER OF SEQ ID NOS: 423
SEQ ID NO 257
FILING DATE: 1999-11-30
APPLICATION NUMBER: PCT/US99/28564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 257, Application US/09904920A Patent No. 6806352 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Goddard, A.
Godowski, Paul J.
Grimaldi, Christopher J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             errara, Napoleone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Fong, Sherman
Gao, Wei-Qiang
Gerber, Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gerritsen, Mary E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FFPLLWALPLLGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Kljavin, Ivar J.
Mather, Jennie P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 99.73
Matches 313; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Genentech, Inc.
APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Saton, Dan L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
ORGANISM: Homo Sapien
US-09-903-603A-257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pan, James
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
```

à ద 8 윱. à Gaps ô

APPLICANT

ઠે 셤

```
61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181 EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181 EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241 PLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFFWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241 PLACKKYGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDFSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                 1 MGARGALLLALLLARAGLKKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR 60
                                                                                                                                                                                                                                                                                                                                                                      1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                     Length 314;
                                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                  99.7%; Score 1723; DB 4;
99.7%; Pred. No. 3.5e-165;
iive 1; Mismatches 0;
  PRIOR APPLICATION NUMBER: PCT/US99/30999
PRIOR FILING DATE: 1999-12-20
PRIOR APPLICATION NUMBER: PCT/US00/00219
PRIOR FILING DATE: 2000-01-05
NUMBER OF SEQ ID NOS: 423
SEQ ID NO 257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 257, Application US/09905381A Patent No. 6818746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Godowski, Paul J.
Grimaldi, Christopher J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Roy, Margaret Ann
Stewart, Timothy A.
Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gurney, Austin L.
Hillan, Kenneth, J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ferrara, Napoleone
Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gerber, Hanspeter
Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kljavin, Ivar J.
Mather, Jennie P.
Pan, James
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Paoni, Nicholas F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301 FFPLLWALPLIGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301 FFPLLWALPLIGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
APPLICANT: Genentech, Inc.
APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
APPLICANT: Besnoyers, Luc
                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 99.73
Matches 313; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Fong, Sherman
Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILE REFERENCE: 10466-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Goddard, A.
                                                                                                                                                                         TYPE: PRT
CRGANISM: Homo Sapien
US-09-909-064-257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-905-381A-257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT
                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                   유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          윰
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Roy, Margaret Ann
APPLICANT: Stewart, Timothy A.
APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Tumas, Daniel
APPLICANT: William, P. Mickey
APPLICANT: William, P. Mickey
APPLICANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: 10466-14
CURRENT APPLICATION NUMBER: US/09/909,064
CURRENT FILING DATE: 2001-07-18
PRIOR PILING DATE: 2000-02-22
PRIOR PILING DATE: 1999-07-07
PRIOR APPLICATION NUMBER: US 60/143,048
PRIOR FILING DATE: 1999-07-07
PRIOR APPLICATION NUMBER: US 60/145,698
241 PLACNKNGLWYQIGVVSWGVGCGRPNRPGVTNISHHPEWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR FILING DATE: 1999-12-02
PRIOR APPLICATION NUMBER: PCT/US99/30095
PRIOR FILING DATE: 1999-12-16
PRIOR APPLICATION NUMBER: PCT/US99/30911
PRIOR FILING DATE: 1999-12-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/21547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: PCT/US99/23089
FILING DATE: 1999-10-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: PCT/US99/28214
FILING DATE: 1999-11-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: PCT/US99/28565
PRIOR FILING DATE: 1999-12-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RIOR FILING DATE: 1999-07-26
RIOR APPLICATION NUMBER: US 60/146,222
RIOR FILING DATE: 1999-07-28
RIOR APPLICATION NUMBER: PCT/US99/20594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RIOR APPLICATION NUMBER: PCT/US99/20944
RIOR FILING DATE: 1999-09-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: PCT/US99/21090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: PCT/US99/28313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: PCT/US99/28564
PRIOR FILING DATE: 1999-12-02
                                                                                                                                                                                                                   US-09-909-064-257

's Sequence 257, Application US/09909064

; Patent No. 6818449

; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Godowski, Paul J.
Grimaldi, Christopher J.
                                                                                                                                                                                                                                                                                                                                                                                                                                       Ferrara, Napoleone
Filvaroff, Ellen
Fong, Sherman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hillan, Kenneth, J.
Kljavin, Ivar J.
Mather, Jennie P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gerber, Hanspeter
Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Paoni, Nicholas F.
                                                                          301 FFPLLWALPLLGPV 314
                                                                                                                       301 FFPLLWALPLICPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Surney, Austin L.
Hillan, Kenneth.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LING DATE: 1999-09-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LING DATE: 1999-09-15
                                                                                                                                                                                                                                                                                                                  Genentech, Inc.
Ashkenazi, Avi
Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Goddard, A.
                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
APPLICANT:
```

```
Sequence 257, Application US/09906618 Patent No. 6828146
                                                                                                                                                                                                                                                                                                                                                                                                                          Godowski, Paul J.
Grimaldi, Christopher J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gurney, Austin L.
Hillan, Kenneth, J.
Kljavin, Ivar J.
Mather, Jennie P.
Pan, James
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Paoni, Nicholas F.
Roy, Margaret Ann
Stewart, Timothy A.
                                                                                                                                                                                                                              Perrara, Napoleone
                                                                                                                                                                                                                                                                                                                                         Gerber, Hanspeter
Gerritsen, Mary E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWNVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTPEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241 PLACNYDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241 PLACNKNGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 MGARGALILIALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 99.7%; Score 1723; DB 4; Length 314; Best Local Similarity 99.7%; Pred. No. 3.5e-165; Matches 313; Conservative 1; Mismatches 0; Indels (
                                           PRIOR FILING DATE: 2000-02-22
PRIOR APPLICATION NUMBER: US 60/143,048
PRIOR PLING DATE: 1999-07-07
PRIOR APPLICATION NUMBER: US 60/145,698
PRIOR PILING DATE: 1999-07-26
PRIOR APPLICATION NUMBER: US 60/146,222
PRIOR PILING DATE: 1999-07-28
PRIOR PLING DATE: 1999-09-08
PRIOR PLING DATE: 1999-09-08
PRIOR PLING DATE: 1999-09-08
PRIOR PLING DATE: 1999-09-08
                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 1999-09-08
PRIOR APPLICATION NUMBER: PCT/US99/20944
PRIOR PILING DATE: 1999-09-13
PRIOR APPLICATION NUMBER: PCT/US99/21090
PRIOR APPLICATION NUMBER: PCT/US99/21647
PRIOR APPLICATION NUMBER: PCT/US99/21647
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/23089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR PELICATION NUMBER: PCT/US99/30095
PRIOR FILING DATE: 1999-12-16
PRIOR PELING DATE: 1999-12-16
PRIOR PELING DATE: 1999-12-20
PRIOR PELING DATE: 1999-12-20
PRIOR PELING DATE: 1999-12-20
PRIOR PELING DATE: 1999-12-20
PRIOR PELING DATE: 2000-01-05
NUMBER OF SEQ ID NOS: 423
LENGTH: 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OR FILING DATE: 1999-10-05
OR FILING DATE: 1999-10-05
OR APPLICATION NUMBER: PCT/US99/28214
OR APPLICATION NUMBER: PCT/US99/28313
OR FILING DATE: 1999-11-30
OR APPLICATION NUMBER: PCT/US99/28564
OR APPLICATION NUMBER: PCT/US99/28565
OR FILING DATE: 1999-12-02
OR APPLICATION NUMBER: PCT/US99/28565
OR FILING DATE: 1999-12-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FFPLLWALPLIGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
ORGANISM: Homo Sapien
US-09-905-381A-257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
```

RESULT 11

APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: 10466-14 PILE REPERENCE: 1046-14
CURRENT APPLICATION NUMBER: US/09/906,618
CURRENT FILING DATE: 2001-07-16
PRIOR APPLICATION NUMBER: US/0143,048
PRIOR PELICATION NUMBER: US 60/145,698
PRIOR PELICATION NUMBER: PCT/US99/20594
PRIOR PELICATION NUMBER: PCT/US99/20594
PRIOR PELICATION NUMBER: PCT/US99/20594
PRIOR PELICATION NUMBER: PCT/US99/20594
PRIOR PELICATION NUMBER: PCT/US99/213089
PRIOR PELICATION NUMBER: PCT/US99/21090
PRIOR PELICATION NUMBER: PCT/US99/21090
PRIOR PELICATION NUMBER: PCT/US99/21090
PRIOR PELICATION NUMBER: PCT/US99/21099
PRIOR PELICATION NUMBER: PCT/US99/21099
PRIOR PELICATION NUMBER: PCT/US99/31099
PRIOR PELING DATE: 1999-12-16
PRIOR PELICATION NUMBER: PCT/US99/3099
PRIOR PELING DATE: 1999-12-16
PRIOR PELICATION NUMBER: PCT/US99/3099
PRIOR PELICATION NUMBER: PCT/US99/30999
PRIOR PELICATION NUMBER: PCT/US99/30999
PRIOR PELICA Gaps

Indels

Length 312;

```
61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                    61 LWDSHVCGVSLLSHRWALTAAHCPET--DLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                              119 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTPEFENRTDCWVTGWGYIK 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG 238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLL 298
                                                                                                                                                                                                                                                                                                                                                                                                                                    VSNIYLSPRYLGNSPYDIALVKLSAPVIYTKHIQPICLQASTFBFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181 EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241 PLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    67 CGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYFVSNIYL 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                68 CGVSLLSHRWALTAAHCFETYSDLSDPSGWRVQFGQLTSMPSFWSLQAYYNRYFVSNIYL 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIKEDEALP 186
                                                                                                                                                                                                                                                                                                1 MGARGALLLALLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10 ALLLARAGLRKP---ESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLRLWDSHV 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11 ALLGTTFGCGVPDYKDDDDAAALAAPFDD---DDKIVGGYALBLGRWPWQGSLRLWDSHV 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ) OTHER INFORMATION: Description of Artificial Sequence: Fusion gene; OTHER INFORMATION: human protease F in CFEK2 zymogen vector US-09-386-642-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5; Mismatches 20; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 1414; DB 4;
Pred. No. 4.4e-134;
                                                                                                                                                          Score 1706; DB 4;
Pred. No. 1.8e-163;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Darrow, Andrew
APPLICANT: Qi, Jenson
APPLICANT: Qi, Jenson
APPLICANT: Andrade-Gordon, Patricia
TITLE OF INVENTION: Zymogen Activation System
FILE REFERENCE: ORT-1028
CURRENT APPLICATION NUMBER: US/09/386,642
CURRENT FILING DATE: 1999-08-31
NUMBER OF SEQ ID NOS: 60
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 53
LENGTH: 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 53, Application US/09386642
Patent No. 6420157
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    81.8%;
                                                                                                                                                             98.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301 FFPLLWALPLLGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     299 FFFLLWALPLIGPV 312
SEQUENCE CHARACTERISTICS:
LENGTH: 312 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 81.8
Best Local Similarity 89.3
Matches 260; Conservative
                                                                                                                                                                                                         Conservative
                                                                                      , MOLECULE TYPE: protein US-09-023-942A-4
                                                                                                                                                          Query Match
Best Local Similarity
Matches 312; Conserva
                                                                        linear
                                                 TYPE: ami
TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SULT 13
-09-386-642-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           127
                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a..
                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            쉽
                                                                                                                                                                                                                                                                                                                                             ઠ
                                                                                                                                                                                                                                                                                                                                                                                     요
                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                        241 PLACNKNGLMYQIGVVSWGVGCGRPNRPGVYTNISHHPEWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                            61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                      61 IMDSHVCGVSLLISHRWALTAAHCPETYSDLSDPSGWMVQPGQLTSMPSFWSLQAYYTRYP 120
                                                                                                                                                                                                                                                                                                                   VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241 PLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                  9
                                                                                                                                                                             1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                   1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                          EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG
                                                                                             Gaps
                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: (US only) ANTALLS Toni Marie and HOOPER John David
TITLE OF INVENTION: NOVEL MOLECULES
NUMBER OF SEQUENCES: 30
CORRESPONDENCE ADDRESS:
                                                 DB 4; Length 314;
                                                                                         0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER: PO5101/97
APPLICATION NUMBER: PO5101/97
FILING DATE: 13-FEB-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PP0422/97
FILING DATE: 18-NOV-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: International PCT Application FILING DATE: 13-FEB-1998
ATTORNEY/AST INFORMATION:
NAME: DIGIGLIO, FRANK S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/023,942A
FILING DATE: 13-FEB-1998
CLASSIPICATION: 435
                                          Score 1723; DB 4;
Pred. No. 3.5e-165;
1; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE: SCULLY, SCOTT, MURPHY & PRESSER STREET: 400 GARDEN CITY PLAZA CITY: GARDEN CITY STATE: NEW YORK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REGISTRATION NUMBER: 31,346
REPERBNICH/DOCKET NUMBER: 11168
TELECOMMUNICATION INFORMATION:
TELEPHONE: (516) 742 4343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 4, Application US/09023942A Patent No. 6479274
                                              99.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301 FFPLLWALPLLGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301 PFPLLWALPLIGPY 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX: (516) 742 4366
TELEX: 230 901 SANS UR
INFORMATION FOR SEQ ID NO: 4
                                          Query Match
Best Local Similarity 99.7
Matches 313; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11530
US-09-906-618-257
                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                  윱
                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
```

Gaps

. 9

Length 306;

늉

us-10-040-647-6.rai

```
Sequence 7, Application US/09386653A Patent No. 6458564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              33.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 42.6%
Matches 123; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                       RESULT 15
US-09-386-653A-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-386-653A-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                 셤
                                                                                                                    ð
                                                                                                                                                 Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ଚ
                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYFVSNIYLSPRYLGNSPYDIALVKLSAPVT 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 119
                                  246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 149 YTKHIQPICLQASTFEFENRTDCWVTGWGYIKEDEALPSPHTLQEVQVAIINNSMCNHLF 208
128 SPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIKEDEALP 187
                                                                   188 SPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGGPLACNK 247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3 LSGPCGHRIIPSRIVGGDDAELGRWPWQGSLRVWGNHLCGATLLNRRWVJJAAHCFQ--K 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29 LSGPCGRRVITSRIVGGEDAELGRWPWQGSLRLWDSHVCGVSLLSHRWALTAAHCFETYS 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGGPLACNK
                                                                                                                      248 NGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGWSQPDPSW 298
                                                                                                     247 DGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSW 297
                                                                                                                                                                                                      US-09-023-942A-26

| Sequence 26, Application US/09023942A
| Patent NO. 6479274
| GENERAL INFORMATION:
| APPLICANT: (US only) ANTALIS Toni Marie and HOOPER John David
| TITLE OF INVENTION: NOVEL MOLECULES
| VUMBER OF SEQUENCES: 30
| CORRESPONDENCE ADDRESS: ADDRESSEE: SCULLY, SCOTT, MURPHY & PRESSER
| STREET: 400 GARDEN CITY PLAZA
| CITY: GARDEN CITY
| STRIE: NEW YORK
| COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    64.4%; Score 1113.5; DB 4; Length 285; 69.1%; Pred. No. 7.3e-104; tive 35; Mismatches 50; Indels 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IN PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/023,942A
FILING DATE: 13-FEB-1998
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LELEFAX: (516) 742 4343
LELEX: 230 901 SANS UR
INFORMATION FOR SEQ ID NO: 26:
SEQUENCE CHARACTERISTICS:
LENGTH: 285 amiliary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REGISTRATION NUMBER: 31,346
REFERENCE/DOCKET NUMBER: 111
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity 69.18
Matches 197; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                       ZIP: 11530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-023-942A-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY:
                                  187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                           RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                   셤
                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                  8
                                                                                                     ò
```

```
120 YNNFIQPICLINSTYKFENRTDCWVTGWGAIGEDESLPSPNTLQEVQVAIINNSMCNHMY 179
                                                                                                                 180 KKPDFRINIMGDMVCAGTPEGGKDACFGDSGGPLACDQDTVWYQVGVVSWGIGCGRPNRP 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             122 SNIYLSPRYLGN-SPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181 EDEALPSPHTLQEVQVAIINNSMCNHLFLK---YSFR-KDIFGDMVCAGNAQGGKDACFG 236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    64 SHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFG--QLTSMPSFWSLQAYYTRYFV 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3 RPAAVPLILLCFGSQRAKAATA-----GGRPRMLNRWVGGQDTQEGEWPWQVSIQRNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 57 SHFCGGSLIAEQWVLTAAHCFR---NTSETSLYQVLLGARQLVQP----GPHAMYAR--V
                                                                                     209 LKYSFRKDIFGDMVCAGNAQGGKDACFGDSGGPLACNKDGLWYQIGVVSWGVGCGRPNRP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4 RGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLRLWD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               237 DSGGPLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLM 285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 4; Length 290;
                                                                                                                                                                                                 269 GVYTNISHHFEWIQKLMAQSGMSQPDPSWPLLFFPLLWALPLLGP 313
                                                                                                                                                                                                                                   240 GVYTNISHHYNWIQSTMIRNGLLRPDPVPLLLFLTLAWASSLLRP 284
                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:

APPLICANT: Andrade-Gordon, Patricia
APPLICANT: Darrow, Andrew
APPLICANT: Qi, Jian-shen
TITLE OF INVENTION: DNA encoding the novel human serine
TITLE OF INVENTION: procease T
FILE REFERENCE: ORINGER: US/09/386,653A
CURRENT APPLICATION NUMBER: US/09/386,653A
NUMBER OF SEQ ID NOS: 11
SOFTWARE: Patentin Ver. 2.0
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; Score 573; DB 4; Length 29; Pred. No. 2e-49; 44; Mismatches 100; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             completed: February 27, 2005, 20:24:33
```

```
Sun Mar
```

```
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                 sw model
                                                                               OM protein - protein search, using
                                                                                                                        Run on:
```

February 27, 2005, 20:03:40; Search time 117.374 Seconds (without alignments) 1034.667 Million cell updates/sec US-10-040-647-6

1 MGARGALLLALLLARAGLRK......PSWPLLFFPLLWALPLLGPV 314 Perfect score: Sequence: Scoring table:

2105692 seqs, 386760381 residues BLOSUM62 Gapop 10.0 , Gapext 0.5 Searched:

2105692 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries •• Database

geneseqp2003as:* geneseqp2003bs:* A Geneseq 16Dec04: geneseqp1990s:* geneseqp2000s:* geneseqp2001s:* geneseqp2002s:* geneseqp2004s:* Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

		aci	aci	n e	pro	aci	qoq	PRO	PRO	ext	еов	PRO	PRO	sec	hum	sec	sec	sec	sec	sec	hum	sec	sec	sec	sec	PRO
	: .	Amino aci	Amino	A human e	Human pro	Amino	Hydrophok	Human	Novel	Human	Human	Human	Human	Human	Novel	Human	Human	Human	Нишап	Human						
	Description	Aaw77297	Aaw77296	Aaw97116	Aay06434		Aab12132	Adc78569	Aab80256	Aau02223	Aae17010	Abu71634	Abu71489	Abu71935	Abo01818	Abu54391	Abo47406	Abu64543	Abu67389	Abo14909	Abu69666	Abo14848	Adb29462	Ada18318	Abo32800	Abo34860
																								,	•	•
							•																			
)																										
	Ð	AAW77297	AAW77296	AAW97116	AAY06434	AAY13388	AAB12132	ADC78569	AAB80256	AAU02223	AAE17010	ABU71634	ABU71489	ABU71935	AB001818	ABU54391	AB047406	ABU64543	ABU67389	ABO14909	ABU69666	ABO14848	ADB29462	ADA18318	AB032800	ABO34860
	DB	7	7	7	~	7	٣	m	4	4	'n	9	9	9	9	ø	ø	9	9	9	9	9	9	9	9	9
	Length	314	314	314	314	314	314	314	314	314	314	314	314	314	314	314	314	314	314	314	314	314	314	314	314	314
æ	Query Match	100.0	7.66	7.66	7.66	7.66	7.66	7.66	7:66	99.7	99.7	99.7	99.7	99.7	99.7	7.66	99.7	99.7	99.7	99.7	99.7	7.66	99.7	7.66	7.66	99.7
	Score	1728	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723
	Result No.	-	~	e	4	5	9	7	œ	o	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25

Ada16293 Human sec Ada42438 Human sec	Abol7538 Human PRO Ada16717 Human sec	Human		Ada42864 Human sec	Abol7599 Human PRO	Adb80572 Ovarian c	Adb77783 Human sec	Adb74919 Human sec	Adc28565 Human sec	Adc39765 Human sec	Adc40279 Human sec	Adc19103 Human sec	Adc34403 Human sec	Adc29458 Human sec	Adc28989 Human sec	Adc40874 Human sec
ADA16293 ADA42438	ABO17538 ADA16717	ADA13146	ADA17361	ADA42864	ABO17599	ADB80572	ADB77783	ADB74919	ADC28565	ADC39765	ADC40279	ADC19103	ADC34403	ADC29458	ADC28989	ADC40874
314 6 314 6	14 6 14 7	314 7	14 7	14 7	14 7	14 7	14 7	14 7	14 7	14 7	14 7	14 7	14 7	14 7	14 7	14 7
99.7 99.7	۲.	۲.	99.7	۲.	.7	99.7	_	۲.	99.7	99.7	.7	99.7	.7	۲.	99.7	. 7.
1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723
	8 6 7 7	30	3 6	33	34	35	36	37	38	39	40	41	42	43	44	45

ALIGNMENTS

Amino acid sequence of long isoform of HELA2. AAW77297 standard; protein; 314 AA (first entry) 07-JAN-1999 AAW77297; RESULT 1 AAW7729

Serine protease; regulation; cell activity; viability; HELA2; ATC2; BCOM3; testisin; fertility; suppressor; testicular germ cell cancer; seminoma; testis-specific expression; antitumour; sperm development; infertility

WO9836054-A1. Homo sapiens

13-FEB-1998; 20-AUG-1998.

97AU-00005101. 97AU-00000422. 98WO-AU000085 13-FEB-1997; 18-NOV-1997;

(AMRA-) AMRAD OPERATIONS PTY LTD.

Antalis TM, Hooper JD;

WPI; 1998-480768/41. N-PSDB; AAV59119.

New serine protease(s) and kinase involved in regulating cell activity and viability - particularly the testis-specific protease HELA2 used for modulation of fertility and as tumour suppressor.

Claim 3; Page 62-64; 167pp; English.

The present sequence represents the amino acid sequence of the long isoform of HELA2. CDNA generated from HeLa cells and PA1-2 expressing HeLa cells was amplified using PCR primers AAV4812-13. Three new sequences were detected in the 480 bp amplicon. These sequences are designated HELA2 and ATC2 which have high homology to serine proteases and BCCM3 which has homology to a kinase. The proteins are involved in or associated with regulation of cell activity and/or viability. Administration of recombinant HELA2 (also called testisin) is used to increase fertility. Downregulation of HELA2 reduces fertility. HELA2 is

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
   also a suppressor of testicular germ cell cancers (seminoma) and is also expressed in some non-testicular cancers (of colon, pancreas, prostate and ovary), so is a marker/potential therapeutic target for cancer. The promoter from the HELA2 gene is useful for testis-specific expression of other genes, e.g. for gene therapy or modulation of fertility. Drugs that block activity of HELA2 should have antitumour activity (other than in testis) while in testis recombinant HELA2 should stop growth of tumours and normalise sperm development (eliminating the need for orchidectomy). Identification of mutant forms of HELA2 can be used to diagnose
                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                      121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PLACNKDGLWYQIGVVSWGVGCRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                  VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                      9
testicular germ cell cancers (seminoma) and is also
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 MGARGALLLALLLARAGIRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                     LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWWVQFGQLTSMPSFWSLQAYYTRYF
                                                                                                                                                                                                                                                                                                                                                                   LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWWVQFGQLTSMPSFWSLQAYYTRYF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                                                                          1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Serine protease; regulation; cell activity; viability; HELA2; ATC2; BCOM3; testisin; fertility; suppressor; testicular germ cell cancer; seminoma; testis-specific expression; antitumour; sperm development;
                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                           Length 314;
                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                          100.0%; Score 1728; DB 2;
100.0%; Pred. No. 5.9e-147;
iive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Amino acid seguence of the short isoform of HELA2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAW77296 standard; protein; 314 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (AMRA-) AMRAD OPERATIONS PTY LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98WO-AU000085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97AU-00005101
97AU-00000422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FFPLLWALPLLGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FFPLLWALPLLGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                          Local Similarity 100.
les 314, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hooper JD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1998-480768/41.
                                                                                                                                                                               Sequence 314 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13-FEB-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13-FEB-1997;
18-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-JAN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20-AUG-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Antalis TM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  infertility
                                                                                                                                                infertility
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAW77296;
                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Serine
                                                                                                                                                                                                                              Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 2
      8$8888888888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    원
                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
```

```
The present sequence represents the amino acid sequence of the short isoform of HELA2. CDNA generated from HeLa cells and PAI-2 expressing tells was amplified using PCR primers AAV48312-13. Three new sequences were detected in the 480 bp amplicon. These sequences are designated HELA2 and ATC2 which have high homology to serine proteases and BCOM3 which has homology to a kinase. The proteins are involved in or associated with regulation of cell activity and/or viability. According to a suppressor of testicular activity and/or viability. HELA2 is also a suppressor of testicular germ cell cancers (seminoma) and is also expressed in some non-testicular cancers (of colon, pancreas, prostate or of cell activity and/or promoter from the HELA2 gene is useful for testis-specific expression of promoter from the HELA2 gene is useful for testis-specific expression of other genes, e.g. for gene therapy or modulation of fertility. Drugs that thock activity of HELA2 should have antitumour activity (other than in testis recombinant HELA2 should stop growth of tumours and normalise sperm development (eliminating the need for orchidectomy).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241 PLACNROGLWYQIGVVSWGVGCGRPNRPGVYINISHHFEWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; eosinophil; serine protease; allergic disease; infectious disease; tumour; granulomatous disease; collagen disease; vascular inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                          New serine protease(s) and kinase involved in regulating cell activity and viability - particularly the testis-specific protease HELA2 used for modulation of fertility and as tumour suppressor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMYCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 MGARGALILALILARAGIRKPESQEAAPLSGPCGRRVITSRIVGCEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 314;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 1723; DB 2;
Pred. No. 1.7e-146;
1; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAW97116 standard; protein; 314 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A human eosinophil serine protease.
                                                                                                           Claim 2; Fig 6; 167pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301 FFPLLWALPLIGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FFPLLWALPLLGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              313; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
N-PSDB; AAV59118.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 314 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           04-MAY-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAW97116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAW97116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8XXXEXEXEXXXX8
유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
```

Homo sapiens

```
from the consensus sequence (see AAX87151) of overlapping cDNA clones obtained from various libraries. Northern analysis shows expression of HUPM-3 in cardiovascular, haematopoietic and male reproductive cDNA libraries. Approximately 86% of these libraries are associated with neoplastic disorders. The invention provides 12 new human proteases, i.e. HUPM-1 to -12 (see AAX06432-43), and the polynucleotides encoding them producing HUPM polypeptides, as well as agonists and matagonists of HUPM. Methods for treating or preventing cell proliferative disorders and immune disorders using HUPM or HUPM antagonists are claimed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       developmental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         the present sequence represents novel human protease HUPM-3, as deduced
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 MGARGALILALLIARAGIRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tang YT;
                                                                                                                                                                                      'note= "casein kinase II phosphorylation site"
                                                                                                                                                           note= "protein kinase C phosphorylation site"
                                                                                                                                                                                                                                                                       phosphorylation site"
                                                                                                                                                                                                                                                                                                                          /note= "protein kinase C phosphorylation site"
                                                                                                                                                                                                                                                                                                                                                                                           "casein kinase II phosphorylation site"
                                        'note= "protein kinase C phosphorylation site"
                                                                   'note= "protein kinase C phosphorylation site"
                                                                                            'note≂ "protein kinase C phosphorylation site"
                                                                                                                                   'note= "casein kinase II phosphorylation site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 314;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel human protease molecules useful in the treatment of disorders and/or cancers.
                                                                                                                                                                                                                  phosphorylation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Corley NC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99.7%; Score 1723; DB 2; 99.7%; Pred. No. 1.7e-146; ive 1; Mismatches 0;
 20. .314
/note= "putative mature protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Guegler KJ,
                                                                                                                                                                                                                 'note= "casein kinase II
                                                                                                                                                                                                                                                                      'note= "casein kinase II
                                                                                                                                                                                                                                                                                                 "N-glycosylated"
                                                                                                                                                                                                                                             'note= "N-glycosylated"
                                                                                                                                                                                                                                                                                                                                                                  'note= "N-glycosylated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; Page 71-72; 90pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bandman O, Hillman JL, Yue H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99WO-US000655.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98US-00008271.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (INCY-) INCYTE PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches 313; Conservative
                                                                                                                                                                                                                                                                                                 'note=
                                                                                                                                                                                                                                                                                                                                                                                           /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1999-430616/36.
                                                                                                                                                                                                                                                                                                                                        238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             N-PSDB; AAX87151.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 314 AA;
                           Modified-site
                                                     Modified-site
                                                                              Modified-site
                                                                                                                      Modified-site
                                                                                                                                               Modified-site
                                                                                                                                                                        Modified-site
                                                                                                                                                                                                    Modified-site
                                                                                                                                                                                                                               Modified-site
                                                                                                                                                                                                                                                        Modified-site
                                                                                                                                                                                                                                                                                 Modified-site
                                                                                                                                                                                                                                                                                                            Modified-site
                                                                                                                                                                                                                                                                                                                                      Active-site
Modified-site
                                                                                                                                                                                                                                                                                                                                                                             Addified-site
                                                                                                                                                                                                                                                                                                                                                                                                                      409936550-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12-JAN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16-JAN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                2-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
 Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Shah P;
 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       용
                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                     protease is useful in drug compositions for the prevention and treatment of allergic diseases, infectious diseases, tumour diseases, granulomatous diseases, collagen diseases and vascular inflammation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWdYIK 180
                                                                                                                                                                                    New eosinophils serine protease - useful for prevention and treatment of allergic, infectious, tumor, granulomatous and collagen diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                        The present sequence represents a human eosinophil serine protease. The
                                                                                                                                                                                                                                                                                                                                                                                                                      LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BDEALPSPHTLOEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAOGGKDACFGDSGG
                                                                                                                                                                                                                                                                                                                                                                                                        1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWOGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Protease; human; HUPM-3; cell proliferation; cancer; immune disorder;
                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                               ô
                                                                                                                                                                                                                                                                                                                                                99.7%; Score 1723; DB 2; Length 314; 99.7%; Pred. No. 1.7e-146; Live 1; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note= "putative signal peptide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                              Claim 1; Page 9-10; 18pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAY06434 standard; protein; 314 AA.
                                                                 97JP-00191319
                                                                                            97JP-00191319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FFPLLWALPLLGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity 99.7
Matches 313; Conservative
                                                                                                                   (ONOY ) ONO PHARM CO LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human protease HUPM-3.
                                                                                                                                              WPI; 1999-183825/16.
                                                                                                                                                                                                                                                                                                                                                               Local Similarity
                                                                                                                                                            N-PSDB; AAX15336
                                                                                                                                                                                                                                                                                                                        Sequence 314 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               inflammation;
            JP11032768-A.
                                                              16-JUL-1997;
                                                                                          16-JUL-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             27-SEP-1999
                                       09-FEB-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAY06434;
                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Key
Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAY0643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT
111X8X4X6X6X6XXXX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                        ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
```

ö

Gaps

ö

```
28-OCT-1997;
28-OCT-1997;
29-OCT-1997;
                                                                                                                                                                 24-NOV-1997
24-NOV-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                  240
              180
                                                   180
                                                                                 240
                                                                                               PLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHPFWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                     241 PLACNROGLWYQIGVVSWGVGCGRPNRPGVTNISHHFEWIQKLMAQSGMSQPDPSWPLL 300
       LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                         Secreted protein; transmembrane protein; human; enterocolitis; Collinger-Ellison syndrome; gastrointestinal ulceration; congenital microvillus atrophy; skin disease; cell growth; abnormal keratinocyte differentiation; psoriasis; epithelial cancer; Parkinson; disease; Als; neuropathy; fibromodulin; dermal scarring; Usher Syndrome; Atrophia areata; anti-thrombotic; wound healing; tissue repair.
                                               VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWYIGWGYIK
                                    VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWYTGWGYIK
                                                                  EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG
                                                                               EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                            Amino acid sequence of protein PRO303
                                                                                                                                                                                 Ź
                                                                                                                                                                               AAY13388 standard; protein; 314
                                                                                                                                                                                                                                                                                                                                                                      9705-0059115P
9705-0059117P
9705-0059121P
9705-0059124P
9705-0059164P
9705-0059263P
9705-0062125P
9705-0062285P
9705-0062285P
9705-0062287P
9705-0062814P
9705-0063814P
9705-0063812P
9705-0063812P
9705-0063812P
9705-0063812P
9705-0063812P
9705-0063812P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97US-0063541P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97US-0063544P
                                                                                                                                     FFPLLWALPLIGPV 314
                                                                                                                                                                                                             25-JUN-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 28-OCT-1997;
28-OCT-1997;
28-OCT-1997;
                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                   WO9914328-A2
                                                                                                                                                                                                                                                                                                                                                 16-SEP-1998;
                                                                                                                                                                                                                                                                                                                                  25-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                       17-SEP-1997
                                                                                                                                                                                                                                                                                                                                                                                     17-SEP-1997
                                                                                                                                                                                                                                                                                                                                                                                                                   8-SEP-1997
                                    121
                                                  121
                                                                  181
                                                                                181
                                                                                                                            301
                                                                                                                                           301
                                                                                                                                                                                             AAY13388;
                                                                                                                                                                                                                                                                                                                                                                                                                          18-SEP-19
15-OCT-19
17-OCT-19
17-OCT-19
21-OCT-19
       19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24-OCT-1
                                                                                                                                                                        AAY13386
                                                                                                                                                                  RESULT
                                                                             유
                                                                                                        g
                                                                                                                                                                                       g
                                   ò
                                               임
                                                              ò
                                                                                             ò
                                                                                                                           8
                                                                                                                                         셤
```

```
AAY13344-403 represent secreted and transmembrane human proteins. The CDNA sequences are obtained from CDNA libraries, prepared from fetal Lung, fetal kidney, fetal brain, fetal liver and fetal retina. The encoded polypeptides have specific uses based on their homology to known polypeptides, e.g. PRO211 and PRO217 can be used for disorders associated with the preservation and maintenance of gastrointestinal mucosa and the repair of acute and chronic mucosal lesions (e.g. enterocolitis, collinger-Ellison syndrome, gastrointestinal ulceration and congenital microvillus arrophy, skin diseases associated with abnormal keratinocyte differentiation (e.g. psoriasis, epithelial cancers such as lung squamous call carcinoma of the vulva and gliomas), potent effects on cell growth can development, diseases related to growth or survival of nerve cells including Parkinson's disease, Alzheimer's disease, Alzheimer's disease, Alzheimer's disease, Alzheimer's disease, Alzheimer's because the tracting dermal scarring. PRO264 can be used as a target for anti-tumor druge. PRO359 can be used as an anti-thrombotic agent, PRO287 polypeptides and portions may be used as an anti-thrombotic agent, PRO287 polypeptides and portions may can be used for treating problems of the kidney, uterus, endometrium, blood vessels, or related tissue, e.g. in the heart of genital tract
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDFSGWNVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New isolated human genes and polypeptides used in, e.g. treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 314;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 99.7%; Score 1723; DB 2; Length 31 Best Local Similarity 99.7%; Pred. No. 1.7e-146; Matches 313; Conservative 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pennica D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Goddard A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 12; Fig 92; 320pp; English.
                                                                              97US-0063704E
97US-0063734P
97US-0063738P
97US-0063738P
97US-0064215P
97US-0064215P
97US-0064216P
97US-006424P
97US-006426P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        97US-0066453P.
97US-0066466P.
97US-0066511P.
97US-0066770P.
97US-0066772P.
97US-0063550P.
97US-0063564P.
97US-0063435P.
                                                                                                                                                                                                                                                                                                                                                                                                      97US-0065846P.
97US-0065693P.
97US-0066120P.
97US-0066364P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97US-0066840P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gastrointestinal ulceration.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Wood WI, Gurney AL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1999-229533/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            N-PSDB; AAX52259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 314 AA;
                                                                              29-0CT-1997;
29-0CT-1997;
29-0CT-1997;
29-0CT-1997;
29-0CT-1997;
31-0CT-1997;
31-0CT-1997;
31-0CT-1997;
12-NOV-1997;
12-NOV-1997;
11-NOV-1997;
11-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21-NOV-1997;
24-NOV-1997;
24-NOV-1997;
24-NOV-1997;
```

```
Secretory proteins play important roles in the proliferation control, the differentiation induction, the material transport and the biophylaxis of cells. Membrane proteins have important roles as signal receptors, ion channels and transporters. The present sequence is a human protein which has at least one hydrophobic domain. This protein may be a secretory or a membrane protein. The present protein may have cytokine and cell proliferation/differentiation activity, immune stimulating or suppressing activity, haematopoiesis activity, chemotactic/chemokinetic activity, haemostatic and thrombolytic activity, anti-inflammatory activity and tumour
240
                                                                                EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG 240
                                                                                                                                           241 PLACNROGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                             PLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                              Human; secreted protein; membrane protein; hydrophobic domain; proliferation control; differentiation induction; material transport; biophylaxis; signal receptor; ion channel; transporter; immunostimulant; immunosuppressant; haematopoiesis regulator; chemotactic; chemokinetic; haemostatic; thrombolytic; anti-inflammatory; tumour inhibition; autoimmune disease; Alzheimer's disease; Parkinson's disease; cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Proteins comprising hydrophobic regions, such as secretory and membrane proteins, useful in research and diagnostics and having various activities e.g. immunomodulatory, antiinflammatory, chemokinetic,
                                                              EDEAL PS PHTLQEVQVAI INNSMCNHLFLKYS FRKD I FGDMVCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                                                                                                                                                                                                  Hydrophobic domain protein from clone HP03116 isolated from KB cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; Page 238-240; 410pp; English.
                                                                                                                                                                                                                                                                                                    AAB12132 standard; protein; 314 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98JP-00326255.
98JP-00364315.
99JP-00069811.
99JP-00119299.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99WO-JP006412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99JP-00138169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CHEM RES CENT
                                                                                                                                                                                        301 FFPLLWALPLIGPY 314
                                                                                                                                                                                                             WPI; 2000-387753/33.
N-PSDB; AAA62005, AAA62015.
                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 hemostatic, thrombolytic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (SAGA ) SAGAMI CHEM RE
(PROT-) PROTEGENE INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Kimura T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200029448-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27-APR-1999;
19-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-NOV-1998;
22-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                   02-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-MAY-2000
                                                                                                                                                                                                                                                                                                                                    AAB12132;
                                                              181
                                                                                             181
                                                                                                                             241
                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Kato S,
                                                                                                                                                                                                                                                                                       AAB1213;
                                                                                                                                                                                                                                                                       RESULT
                                                                                                                                                                                                                                                                                                      g
                                                      ઠે
                                                                                   g
                                                                                                                         ò
                                                                                                                                                8
                                                                                                                                                                                      ठ
                                                                                                                                                                                                                 요
 8
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                               61 IMDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                             61 LWDSHVCGVSLLSHRWALTAAHCPETYSDLSDPSGWNVQPGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PLACNICNGLWYQIGVVSWGVGCGRPNRFGVYTNISHHFFWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antinflamatory; antiulcer; cytostatic; antipsoriatic; antiparkinsonian; nootropic; neuroprotective; vasotropic; chemotaxic; angiogenic; neuroprotective; vasotropic; chemotaxic; antinchematic; antiarthritic; antiarthratic; antiarthr
                                                                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSPRKDIFGDMVCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                                                                                  1 MGARGALILALILARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EDEAL PS PHTLQEVQVA I INNSMCNHLFLKY SFRKD I FGDMVCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                                                1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PLACNKDGLWYQ1GVVSWGVGCGRPNRPGVYTN1SHHFFW1QKLMAQSGMSQPDFSWPLL
                                                                                                                                                                                                Gaps
     for
inhibition activity. The present protein could therefore be used f
treatment of autoimmune disease, Alzheimer's disease, Parkinson's
disease, and cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WI,
                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Wood
                                                                                                                                            Length 314;
                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pennica D,
                                                                                                                                            Score 1723; DB 3;
Pred. No. 1.7e-146;
1; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hillan K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADC78569 standard; protein; 314 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gurney AL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99WO-US021090.
                                                                                                                                               99.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                   Best Local Similarity 99.7
Matches 313; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human PRO303 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Goddard A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2000-271434/23.
                                                                                                   Sequence 314 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        #0200015796-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         23-MAR-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADC78569;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Chen J,
Yuan J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT
ប្តស្តម្ភន្ត
                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                        유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
```

22-FEB-2000; 2000WO-US004414

```
The polypeptides and polynuclectides of the invention may be useful as research tools and as therapeutics for treating enterocolitis. Zollinger-Blison syndrome, gastrointestinal ulceratinn, psoriasis, cancer, Parkinson's disease, Alzheimer's disease, ALS, neuropathies, dermal scartilage formation, anglogenesis, asthma, rheumatoid arthritis, multiple sclerosis, inflammatory disorders, atherosclerosis, inflammatory disorders, atherosclerosis, cardiac injury, infertility, premature aging, AIDS, diabetes complications and stroke. The molecules may also be utilised during gene therapy procedures and transgenic animal production. The current sequence is that of the human PRO protein of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                  Novel nucleic acids encoding secreted and transmembrane polypeptides with homology, e.g. to growth and cancer-associated antigens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PLACNKNGLMYQIGVVSWGVGCGRPNRPGVTINISHHFEMIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                             invention relates to a novel nucleic acid encoding a PRO polypeptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           antiparkinsonian nootropic; neuroprotective; vulnerary; cardiant; antiangiogenic; vasotropic; antiasthmatic; antirheumatic; cancer; antiarthritic; antiinfertility; antidiabetic; antiviral; diabetes; ophthalmological; gene therapy; skin disease; gastrointestinal disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; PRO; dermatological; antipsoriatic; cytostatic; antiinflammatory;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181 EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                                                                                                                                                         99.7%; Score 1723; DB 3; Length 314; 99.7%; Pred. No. 1.7e-146; Live 1; Mismatches 0; Indels (
                                                                                         Claim 12; SEQ ID NO 257; 355pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAB80256 standard; protein; 314 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301 FFPLLWALPLLGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24-APR-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity 99.7
les 313; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ischaemia; inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human PRO303 protein.
                                                                                                                                                                                                                                                                                                                                                                          Sequence 314 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAB80256;
                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
```

WO200104311-A1 Homo sapiens

18-JAN-2001.

```
The present sequence is one of sixty one novel secreted and transmembrane diseases (e.g. paorissis), cancers (e.g. lung squamous cell carcinoma), gastrointestinal disorders (e.g. enterocolitis), neurodegenerative diseases (e.g. Alzheimer's disease, Parkinson's disease), wound repair, cardiovoscular disorders (e.g. enterocolitis), neurodegenerative cardiovoscular disorders (e.g. enterocolitis), increase, wound repair, ischaemias such as coronary ischaemia, atheroselerosis), inflammatory disorders (e.g. asthma, rheumatoid arthritis, multiple sclerosis), inflammatory infertility, AIDS and diabetes and retinal disorders such as retinitis pigmentosum. The PRO nucleic acids have applications in molecular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 LWDSHVCGVSLLSHRWALTAAHCRETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sixty one nucleic acids encoding PRO polypeptides which are useful in the treatment of skin diseases (e.g. psoriasis), cancers (e.g. lung squamous cell carcinoma) and neurodegenerative diseases (e.g. Alzheimer's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 MGARGALILALLIARAGLEKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWFWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EDEALPS PHTLOEVQVAIINNSMCNHLFLKYS FRKDIFGDNVCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                Ferrara N;
n ME, Goddard A;
Kljavin IJ;
Tumas D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 314;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 99.7%; Score 1723; DB 4; Length 3 Best Local Similarity 99.7%; Pred. No. 1:7e-146; Matches 313; Conservative 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                Desnoyers L, Eaton DL,
W, Gerber H, Gerritsen
Gurney AL, Hillan KJ,
F, Roy MA, Stewart TA,
                                                                                                                                                                                                                                                                                                                                          Ashkenazi AJ, Botstell L, Filvaroff E, Fong S, Gao W, Gerber H, Godowski PJ, Grimaldi CJ, Gurney AL, To Pan J, Paoni NF, Roy MA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 1; Fig 92; 393pp; English.
                                                                                                                                                                     99WO-US028214.
99WO-US02813.
99WO-US028564.
99WO-US0208565.
99WO-US030095.
99WO-US0300911.
                                           99US-0143048P.
99US-0145698P.
99US-0146222P.
99WO-US020594.
                                                                                                        99WO-US021090.
99WO-US021090.
99WO-US021547.
99WO-US023089.
                                                                                                                                                                                                                                                                                                                                                                                                              Wood WI;
                                                                                                                                                                                                                                                                                                                    (GETH ) GENENTECH INC
                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2001-081051/09.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 N-PSDB; AAF72417.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 314 AA;
                                                                                                      13-SEP-1999;
15-SEP-1999;
15-SEP-1999;
05-OCT-1999;
29-NOV-1999;
02-DEC-1999;
02-DEC-1999;
16-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gene mapping
                                                                          28-JUL-1999
08-SEP-1999
                                                                                                                                                                                                                                                                      20-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             disease).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
```

ö

Gaps ő

```
PLACKEDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLL 300
                                                                                           Human extracellular serine protease TADG-16.
                                                                                                                                                                                                                                                                                ĸ
                                                                                                                                                                                                                                                                                Shigemasa
                                                                                                                                        Location/Qualifiers
                                                           AAU02223 standard; protein; 314 AA
                                                                                                                                                                                                                                                                                                                            Claim 3; Fig 4; 124pp; English.
                                                                                                                                                                                                                                                13-OCT-2000; 2000WO-US028558
                                                                                                                                                                                                                                                           99US-00418527
                             FFPLLWALPLIGPV 314
                      FFPLLWALPLLGPV 314
                                                                                                                                                                                                                                                                                O'brien TJ, Underwood LJ,
                                                                                                                  prostate cancer; HLA type.
                                                                                 29-AUG-2001 (first entry)
                                                                                                                                                                                                                                                                     (UYAR-) UNIV ARKANSAS
                                                                                                                                                                                                                                                                                           WPI; 2001-273769/28.
                                                                                                                                                                                                                                                                                                N-PSDB; AAS01698.
                                                                                                                                                                                                                          WO200127257-A1
                                                                                                                                                                                                                                                           14-OCT-1999;
                                                                                                                             Homo sapiens
                                                                      AAU02223;
                      301
                                                                                                                                        Key
Peptide
                                                                                                                                                         Protein
                                                                                                                                                                    Region
                                                                                                                                                                                    Region
                                                                                                                                                                                                    Region
        셤
                                                           ò
                              셤
```

```
61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                            61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                         VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFFWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 MGARGALILIALIARAGIRKPESQEAAPISGPCGRRVITSRIVGGEDABLGRWPWQGSLR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to a purified human eosinophil serine protease-1 (esp-1) like enzyme. Esp-1 like enzyme is useful in in-vitro or in-vivo
                                                                                                                                                                                                                                                                                                                                                                                                                                                            EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; eosinophil serine protease-1; esp-1; enzyme; antiinflammatory; antiathmatic; artiallergic; osteopathic; cytostatic; dermatological; asthma; airway allergy; chronic obstructive pulmonary disease; COPD; osteoporosis; dermatitis; Baget's disease; therapy.
                                                                                                                                                        1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel purified human eosinophil serine protease 1-like enzyme, identifying modulators of enzyme activity for treating Paget's osteoporosis, airway allergy, asthma.
                                                                    Length 314;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human eosinophil serine protease-1 (esp-1) like enzyme #2.
                                                                                                            0; Indels
                                                             Score 1723; DB 4;
Pred, No. 1.7e-146;
1; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAE17010 standard; protein; 314 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure, Fig 4; 131pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21-JUN-2000; 2000US-0212844P.
31-OCT-2000; 2000US-0244171P.
30-MAR-2001; 2001US-0279766P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20-JUN-2001; 2001WO-EP006936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FFPLLWALPLLGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301 FFPLLWALPLLGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                               Query Match
Best Local Similarity 99.7
Matches 313; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2002-122283/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (FARB ) BAYER AG.
                       Sequence 314 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200198503-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27-DEC-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAE17010;
                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Xiao Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAE17010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT
žg
                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            protease, tunour antigor derived gene-16 (TADG-16) protein. TADG-16 is expressed in normal ovaries and testes and in certain ovarian carcinomas. TADG-16 contains the conserved catalytic triad, His-Asp-Ser, and a signal secretion sequence characteristic of the serine protease family. An antisense oligonucleotide having a complementary sequence to the TADG-16 mucleic acid is useful for treating various cancers, including ovarian, breast, lung, colon and prostate. The TADG-16 nucleic acid, TADG-16 protein and antibodies specific to TADG-16 are useful for the diagnosis of cancer. TADG-16. Numerous TADG-16 protein or its fragments are useful for vaccinating an individual against TADG-16. Numerous TADG-16 peptides (AAU02225-AAU02384) are tested for their binding affinity to the 8 haplotypes HLA A0201, HLA A0205, HLA A1, HLA B27, HLA B8, HLA B2702, and HLA B4403
                       241 PLACNKNGLMYQIGVVSWGVGCGRPNRPGVYTNISHHPEWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                             Human, extracellular serine protease, tumour antigen derived gene-16, TADG-16, ovarian carcinoma, breast cancer; lung cancer, colon cancer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New tumor antigen-derived gene-16 protein, useful for diagnosis and treatment of ovarian, breast, lung, colon and prostate cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        236. '241
/note= "Region containing Ser residue of conserved
catalytic triad found in serine proteases"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present sequence represents a novel human extracellular serine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                conserved
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                conserved
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note= "Region containing Asp residue of c
catalytic triad found in serine proteases"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   catalytic triad found in serine proteases"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note= "Region containing His residue of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1. .17
/label= Signal_secretion_sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18. .314
/label= Secreted_TADG-16_protein
```

```
9705-0059124P
9705-0059184P
9705-0059184P
9705-0059286P
9705-0062287P
9705-0062814P
9705-0063814P
9705-0064818P
9705-0064818P
9705-0064818P
9705-0064818P
9705-0064818P
9705-0064818P
9705-0064818P
9705-00668184P
9705-00668188P
9705-00668188P
9705-0066818P
9705-0066818P
9705-0066818P
9705-0066818P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99WO-US020594.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99WO-US020944.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99WO-US028301.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99WO-US030911.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000WO-US003565.
2000WO-US004414.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98WO-US019437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98WO-US025108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99WO-US021090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99WO-US021547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99WO-US023089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99WO-US028214
99WO-US028313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2000WO-US000219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000WO-US015264
2000WO-US020710
                                      18 - SEP - 1997;

18 - SEP - 1997;

17 - OCT - 1997;

24 - OCT - 1997;

25 - OCT - 1997;

26 - OCT - 1997;

27 - OCT - 1997;

28 - OCT - 1997;

29 - OCT - 1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  02-JUN-2000;
28-JUL-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         05-OCT-1999;
29-NOV-1999;
30-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                 29-OCT-1997;
29-OCT-1997;
29-OCT-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .0-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21-NOV-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                    12-NOV-1
17-NOV-1
18-NOV-1
                                                                                                                                                                                                                                                                                                                                                                                                                           07-NOV-1
                                                                                                                                                                                                                                                                                                                                                                                      31-0CT-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24-NOV-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-NOV-
     assays to identify test compounds with potential therapeutic or diagnostic value. Espl-like enzyme modulator is useful for treating espllike enzyme dysfunction related diseases condition such as asthma, airway allergy, chronic obstructive pullmonary diseases (COPD) or osteoporosis. Espllike enzyme is also useful in diagnostic assays for detecting diseases and abnormalities or susceptibility to diseases related to presence of mutations in the nucleic acid sequences which encode the enzyme. Pharmaceutical composition comprising esp-1 like enzyme is useful bone implants particularly dental implants. The present sequence is human esp-1 like enzyme
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; PRO; secreted polypeptide; transmembrane polypeptide; pathological disorder; cardiac insufficiency disorder; protein section; pancreas; diabetes; gastrointestinal mucosa; mucosal lesion; psoriasis; skin disease; karatinocyte differentiation; epithelial cancer; tumour; lung squamous cell carcinoma; epidermoid carcinoma; vulva; glioma; cytostatic; cardiant; endocrine; antidiabetic; gastrointestinal; antiulcer; dermatological; vulnerary.
                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                           300
                                                                                                                                                                                                                                                                           LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWWVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                          VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                  121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                           MGARGALLIALIALLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                          EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                                                                                                                                                                                                                                     PLACNINGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFFWIQKLMAQSGWSQPDPSWPLL
                                                                                                                                                                                                                           1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                           EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                                                                                                                                                                                                                        PLACNKDGLWYQ1GVVSWGVGCGRPNRPGVYTN1SHHFEW1QKLMAQSGMSQPDPSWPLL
                                                                                                                                                                                                     .
0
                                                                                                                                                                          99.7%; Score 1723; DB 5; Length 314; 99.7%; Pred. No. 1.7e-146; ive 1; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABU71634 standard; protein; 314 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97US-0059113P.
97US-0059115P.
97US-0059117P.
97US-0059119P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18-JUL-2001; 2001US-00909088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FFPLLWALPLIGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FFPLLWALPLLGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16-JUN-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human PRO polypeptide #45
                                                                                                                                                                          Query Match
Best Local Similarity 99.7
Matches 313; Conservative
                                                                                                                                                     Sequence 314 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JS2002146709-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-SEP-1997;
17-SEP-1997;
17-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-SEP-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABU71634;
                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT
   엄
                                                                                                                                                                                                                                                                                                                                                                                                                                           용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
```

```
Human; secreted and transmembrane protein; PRO polypeptide; cancer;
Alzheimer's disease; ischaemia; cytostatic; nootropic; vasotropic;
neuroprotective.
                                                                                                                                                                                                                                                                                                                                                                                                                   97US-0063120P.
97US-0063121P.
97US-0063127P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97US - 0063542P
97US - 0063549P
97US - 0063550P
97US - 0063435P
97US - 0063435P
97US - 0063732P
97US - 0063734P
97US - 0063738P
97US - 0063738P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97US - 0064215P
97US - 0064103P
97US - 0064203P
97US - 0064208P
97US - 0065186P
97US - 0065846P
                                                                                                                                                                                                 97US-0059113P.
97US-0059117P.
97US-0059119P.
97US-0059121P.
97US-0059122P.
97US-0059184P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        97US-0063128P.
97US-0063327P.
97US-0063329P.
97US-0063541P.
                                                                                                                                                                                                                                                                                                         97US-0059266P.
97US-0062125P.
97US-0062285P.
97US-0062287P.
                                                                                                                                                                                                                                                                                                                                                              97US-0063486P.
97US-0062814P.
97US-0062816P.
97US-0063045P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    97US-0066364P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              97US-0066466P
                                                                                                                                                                        10-JUL-2001; 2001US-00902853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97US-0066770P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98WO-US019330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99WO-US021547
             Human PRO polypeptide #45
                                                                                                                      JS2002192659-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08-SEP-1999;
13-SEP-1999;
15-SEP-1999;
15-SEP-1999;
                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                        18.5EP-1997
17-0CT-1997
17-0CT-1997
24-0CT-1997
24-0CT-1997
24-0CT-1997
24-0CT-1997
24-0CT-1997
24-0CT-1997
24-0CT-1997
28-0CT-1997
28-0CT-1997
28-0CT-1997
28-0CT-1997
28-0CT-1997
28-0CT-1997
29-0CT-1997
29-0CT-1997
29-0CT-1997
29-0CT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21-NOV-1997;
21-NOV-1997;
24-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              29-OCT-1997;
31-OCT-1997;
31-OCT-1997;
                                                                                                                                                                                                                                                      17-SEP-1997;
17-SEP-1997;
                                                                                                                                                                                                                                                                                17-SEP-1997;
18-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24-NOV-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     03-NOV-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12-NOV-1997
17-NOV-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24-NOV-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24-NOV-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18-NOV-1997
 The invention relates to human PRO polypeptides (secreted or transmembrane polypeptides) and the polymuclectides encoding them. The PRO polypeptides and polyuculectides can be used in treating pathological disorders and tumours, in therapeutic treatment of cardiac insufficiency secretion by the pancreas, including diabetes. They can also be used in treating disorders associated with the preservation and maintenance of treating disorders associated with the preservation and maintenance of gastrointestinal mucosa and the repair of acute and chronic mucosal lesions, and skin diseases associated with abnormal keratinocyte differentiation (e.g., psoriases, epithelial cancers such as lung squamous cell carcinoma, epidernoid carcinoma of the vulya and gliomas).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWNVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181 EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241 PLACNKNGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWdYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241 PLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLL 300
                                                                                                                                                                                                                                                                                                                                                                                                  The sequences can be used as molecular markers for protein electrophoresis purposes and can be utilised in protein-protein binding assays, blochemical screening assays, immunoassays and cell-based assays. This sequence represents a human PRO polypeptide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 MGARGALLLALLLARAGIRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR 60
                                                                                                                                                                                    Isolated nucleic acid useful for e.g., treating pathological disorders encodes a secreted or transmembrane protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EDEALPS PHTLOEVQVAIINNSMCNHLFLKYS FRKDIFGDNVCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                              Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N; Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A; Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ; Amather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D; Williams PM, Wood WI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99.7%; Score 1723; DB 6; Length 314; 99.7%; Pred. No. 1.7e-146; Artive 1; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABU71489 standard, protein, 314 AA.
                                                                                                                                                                                                                             Claim 12; Fig 92; 473pp; English.
24-AUG-2000; 2000WO-US023328.
18-SEP-2000; 2000US-00665350.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FFPLLWALPLIGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FFPLLWALPLLGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10-JUN-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Siminary,
Matches 313; Conservative
                                      (GETH ) GENENTECH INC.
                                                                                                                                             WPI; 2003-328338/31.
N-PSDB; ACA59107.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 314 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABU71489;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABU71489
EXXXE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Š
```

240

```
181 EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG
                                             PLACNYDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHPEWIQKLMAQSGWSQPDPSWPLL
                                                                                     241 PLACNKNGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human, secreted protein, transmembrane protein; PRO; gene therapy; chromosome identification; chromosome marker.
                                                                                                                                                                                                                                                                                                                                                                                                                                         Human secreted/transmembrane protein PRO303.
                                                                                                                                                                                                                                                                                                    Ä
                                                                                                                                                                                                                                                                                                    ABU71935 standard; protein; 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    970S-0059113P
970S-0059115P
970S-0059117P
970S-0059121P
970S-0059121P
970S-0059124P
970S-005926F
970S-0062285P
970S-0062285P
970S-0062814P
970S-0062814P
970S-0062814P
970S-0062814P
970S-0063127P
970S-0063127P
970S-0063127P
970S-0063127P
970S-0063127P
970S-0063127P
970S-0063127P
970S-0063128P
970S-0063127P
970S-0063127P
970S-0063128P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2001US-00904011
                                                                                                                                       FFPLLWALPLLGPV 314
                                                                                                                                                               301 FFPLLWALPLIGPV 314
                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US2003003530-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17, SEP - 1997
17 - SEP - 1997
17 - SEP - 1997
17 - SEP - 1997
18 - SEP - 1997
18 - SEP - 1997
18 - SEP - 1997
19 - SEP - 1997
19 - SEP - 1997
10 - SEP - 1997
10 - SEP - 1997
10 - SEP - 1997
11 - OCT - 1997
12 - OCT - 1997
12 - OCT - 1997
13 - SEP - 1997
14 - SEP - 1997
15 - SEP - 1997
16 - SEP - 1997
17 - SEP - 1997
18 - SEP - 1997
19 - SEP - 1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11-JUL-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                          12-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               02-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07-NOV-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12-NOV-1997
                                               241
                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                 ABU71935;
                                                                                                                                                                                                                                                       RESULT 13
                                                                                                                                                                                                                                                                               4BU7193
                                                                                          셤
                                                                                                                                                                                                                                                                                                    8
                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention relates to the isolation of novel human secreted and transmembrane proteins (PRO polypeptides), and the polynucleotide sequences are useful in sequences encoding them. The polynucleotide sequences are useful in molecular biology, as hybridisation probes, in chromosome and gene mapping, in generating antisense RNA and DNA, and in gene therapy. The polynucleotide sequences may also be used in preparing PRO polypeptides by recombinant techniques, and in generating either transgenic animals or knock-out animals which, in turn, are useful in the development and screening of therapeutically useful reagents. The PRO polypeptides or their antibodies are useful in preparing a medicament for treating a condition responsive to the polypeptide or antibody, such as cancer, Alzheimer's disease or ischaemia, and in various diagnostic assays.

ABU71445-ABU71505 represent human PRO polypeptides of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTERFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 MGARGALLILARAGIRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EDEALPSPHTLQEVQVAIINNSMCNHLFIKYSFRKDIFGDWVCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New isolated nucleic acid encoding a PRO polypeptide, e.g. PRO245 or PRO1868, useful in molecular biology, chromosome and gene mapping, in generating antisense RNA and DNA, and in gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MGARGALLLALLLARAGIRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N; Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A; Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ; Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D; Williams PM, Wood WI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99.7%; Score 1723; DB 6; Length 314; 99.7%; Pred. No. 1.7e-146; tive 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 12; Fig 92; 474pp; English
                                                                                                                                                                                                                                                                                                                                             30-MAR-2000; 2000WO-US008439.
22-MAY-2000; 2000WO-US014042.
02-UJN-2000; 2000WO-US015564.
24-JUD-2000; 2000WO-US020710.
24-AUG-2000; 2000WO-US023328.
18-SEP-2000; 2000US-00665350.
                                                                                                                                                                                                                                                     2000WO-US004114.
2000WO-US005004.
2000WO-US005841.
2000WO-US007377.
                                                                                        99WO-US028564.
99WO-US028565.
99WO-US030095.
                     99WO-US028214.
99WO-US028313.
99WO-US028301.
                                                                                                                                                                                  99WO-US030999.
2000WO-US000219.
2000WO-US003565.
                                                                                                                                                               99WO-US030911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 99.7'
Matches 313; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-361832/34.
N-PSDB; ACA58504.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 314 AA;
                                                                                                                                                                                                     05-JAN-2000;
11-FEB-2000;
22-FEB-2000;
                                                                                                                                                                                                                                                                          24-FEB-2000;
.02-MAR-2000;
20-MAR-2000;
                                                                                     02-DEC-1999;
02-DEC-1999;
16-DEC-1999;
20-DEC-1999;
20-DEC-1999;
                       29-NOV-1999;
30-NOV-1999;
01-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
```

8 6 6 6

6 8 6

```
uncleic acid sequence identity to a nucleic sequence encoding one of 61 secreted/transmembrane polypeptides, or PRO polypeptides or encoding a procesh extracellular domain. Also included are a vector comprising the PRO mucleic acid, a host call comprising the expression of the PRO polypeptide (by culturing the host call for the expression of the PRO polypeptide (by culturing the PRO polypeptide from the call culture), an isolated PRO polypeptide (having at least 80% sequence identity to: (a) an amino acid sequence selected from the 61 PRO proteins; (b) an amino acid sequence selected from the 61 PRO proteins; (b) an amino acid sequence selected from the 61 PRO proteins; (b) an amino acid sequence encoded by a nucleic acid molecule deposited with an ATCC number (detailed in the specification), or (c) an extracellular domain of c a PRO polypeptide or to a PRO polypeptide lacking its associated signal peptide), a chimaeric molecule comprising a PRO polypeptide of fused to a heterologous amino acid sequence, an anti-PRO antibody, detecting a heterologous amino acid sequence, an anti-PRO antibody, detecting a linking a bioactive molecule to a call expressing a PRO245 or PRO1868 and modulating at least one biological activity of a cell expressing a PRO245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New transmembrane polypeptides and nucleic acids encoding the polypeptides, useful in gene therapy, in chromosome identification, chromosome markers, in generating probes and in tissue typing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to an isolated nucleic acid with at least 80%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ". Coccess Desnoyers L, Eaton DL, Pong S, Gao W, Gerber H, Gerritsen I, Grimaldi JC, Gurney AL, Hillan KJ, I Pan J, Paoni NF, Roy MA, Stewart TA, Wood WI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Desnoyers L, E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 12; Fig 92; 484pp; English
                          97US-0066364P.
97US-0066453P.
97US-0066466P.
97US-0066511P.
97US-0066770P.
                                                                                                                        98WO-US018824.
98WO-US019177.
98WO-US019330.
                                                                                                                                                                   98WO-US019537.
98WO-US025108.
99WO-US020594.
99WO-US020944.
                                                                                                                                                                                                                                                                                                                                             99WO-US028565.
99WO-US030095.
99WO-US030911.
                                                                                                                                                                                                                                                                                                                99WO-US028301.
                                                                                                                                                                                                                                                                                                                                                                                                                             2000WO-US003565.
2000WO-US004414.
2000WO-US005004.
                                                                                                                                                                                                                                                                                  99WO-US028214.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000WO-US005841.
2000WO-US007377.
                                                                                                                                                                                                                                                 99WO-US021547
                                                                                                                                                                                                                                                                                                                                                                                                99WO-US030999
                                                                                                                                                                                                                                                                                                                                                                                                                2000WO-US000219
                                                                                                                                                                                                                                                                                                  99WO-US028313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2000WO-US014042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2000US-00665350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2000WO-US023328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (GETH ) GENENTECH INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2003-329602/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               N-PSDB, ACA60211.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ashkenazi A,
Filvaroff E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Williams PM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Godowski PJ,
                                                                                                                                                                                                                                                                                                                                                                                                              05-JAN-2000;
11-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                            22-FEB-2000;
24-FEB-2000;
                                               24-NOV-1997
                                                            24-NOV-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mather JP,
                                                                                                                                                                                                                                                                                  -VON-62
```

Ferrara N;
n ME, Goddard A;
Kljavin IJ;
Tumas D;

```
ö
                              development and screening of therapeutically useful reagents. The nucleic acids may also be used in gene therapy, in chromosome identification, as chromosome markers, or in generating probes. The PRO polypeptides are useful as molecular markers for protein electrophoresis, and the isolated nucleic acids may be used for recombinantly expressing those markers. The PRO polypeptides and nucleic acids may also be used in tissue typing. Anti-PRO antibodies are useful in diagnostic assays for PRO, and in affinity purification of PRO from recombinant cell culture or natural
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                nerve repair; collateral blood vessel formation; cancer; colorectal cancer; haemorrhage; rheumatoid arthritis; diabetes; cirthosis; fibrosis; restenosis; dermal fibrotic condition; keloid; scarring; ischaemia; stroke; hypertension; heart attack; atherosclerosis; infertility; gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                                                           LWDSHVCGVSLISHRWALTAAHCPETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180
 generate either
                                                                                                                                                                                                                                                                                                                                                                                                       61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF 120
                                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PLACNKDGLWYQIGVVSWGYGCGRPNRPGVYTNISHHFBWIQKLMAQSGMSQPDPSWPLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241 PLACNYNGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQYLMAQSGMSQPDPSWPLL
                                                                                                                                                                                                                                                                                                                                                   1 MGARGALILALLIARAGLKKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                                                                                                                                1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181 EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG
                                                                                                                                                                                                                                                                                            Gaps
or PRO1868. Nucleic acids which encode PRO can be used to general transgenic animals or knock-out animals which may be used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; secreted and transmembrane protein; PRO; pharmaceutical;
diagnostic; biosensor; bioreactor; Parkinson's disease;
Alzheimer's disease; inflammation; nephritis; wound healing;
                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                      99.7%; Score 1723; DB 6; Length 314; 99.7%; Pred. No. 1.7e-146;
                                                                                                                                                                                                                                                                                          0; Indels
                                                                                                                                                                                    The present sequence represents a PRO protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel human secreted and transmembrane protein PRO303.
                                                                                                                                                                                                                                                                                            1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABO01818 standard; protein; 314 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97US-0059113P.
97US-0059115P.
97US-0059117P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-JUL-2001; 2001US-00907824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FFPLLWALPLLGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301 FFPLLWALPLLGPV 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                         Best Local Similarity 99.7
Matches 313; Conservative
                                                                                                                                                                                                                      Sequence 314 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JS2002197671-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-SEP-1997;
17-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26-DEC-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                          Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AB001818;
                                                                                                                                                                                      sources.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AB001818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT
 셤
                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                             유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
```

```
97US-0059119P

97US-0059121P

97US-0059122P

97US-0059184P

97US-0062285P

97US-0062285P

97US-0062814P

97US-0062814P

97US-0062814P

97US-0063121P

97US-0063121P

97US-0063121P

97US-0063121P

97US-0063121P

97US-0063124P

97US-006312P

97US-006312P

97US-006312P

97US-006412P

97US-006646P

97US-006646P

97US-006646P

97US-006641P

97US-006641P

97US-006641P
                                                                                                                                                                                                                                                                                                                                                                         98WO-US018824.
                                                                                                                                                                                                                                                                                                                                                                               98WO-US019177.
                                                                                                                                                                                                                                                                                                                                                                97US-0066772P
                                                                                                                                                                                                                                                                                                                                                                                                                               99WO-US021090
99WO-US021547
                                                                                                                                                                                                                                                                                                                                                                                                                                                       99WO-US028214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99WO-US028564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2000WO-US003565
2000WO-US004414
                                                                                                                                                                                                                                                                                                                                                                                                        98WO-US025108
                                                                                                                                                                                                                                                                                                                                                                                                                       99WO-US020944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99WO-US030999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000WO-US015264
                                                                                                                                                                                                                                                                                                                                                                                                98WO-US019437
                                                                                                                                                                                                                                                                                                                                                                                                                99WO-US020594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2000WO-US005004
                                                       17-0CT-1997;
17-0CT-1997;
21-0CT-1997;
24-0CT-1997;
24-0CT-1997;
24-0CT-1997;
                                                                                                              24-OCT-1997;
24-OCT-1997;
24-OCT-1997;
27-OCT-1997;
27-OCT-1997;
        17-SEP-1997;
17-SEP-1997;
17-SEP-1997;
                                18-SEP-1997;
18-SEP-1997;
15-OCT-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22-MAY-2000;
                                                                                                                                                     1-OCT-1997;
                                                                                                                                                                                                                                                                                                                                                   1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                       29-NOV-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20-DEC-1999
                                                                                                                                                                                                                     997
                                                                                                                                                                                                                                                                            NOV-1997
                                                                                                                                                                                                                                                                                                                                   1997
                                                                                                                                                                                                                                                                                                                                                                                         SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEC-1999
                                                                                                                                                                                                     -OCT-1997
                                                                                                                                                                                                            -0CT-1
                                                                                                                                                                                                                           29-0CT-1
29-0CT-1
29-0CT-1
29-0CT-1
                                                                                                                                                                                                                                                                                                                                                                                                                        SEP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                        SEP-1
                                                                                                                                                                                                                                                                                                           -NOV-
```

```
PR 28-7010-2000; 2000W0-US020110.

PR 4AUG-2000; 2000W0-US020110.

PR Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;

X Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;

PI (GETH ) GENENTECH INC.

X Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;

PI (GOOWNE, PC), Grimadi JG, Gurney AL, Hillan KJ, Kljavin IJ;

PI (Allams PM, Wood WI) T, Roy MA, Stewart TR, Thumas D, Mather TP, Pun Goodware TP, Roy MA, Stewart TR, Thumas D, Mather TP, Pun Goodware TP, Thumas D, Mather TP, Pun TP, Pun
```

300

300

241 PLACNKNGLMYQIGVVSWGVGCGRPNRPGVYTNISHHFBWIQKLMAQSGMSQPDPSWPLL

301 FFPLLWALPLLGPV 314

ò

240

EDEALPSPHTLOEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG PLACNKDGLWYQIGVVSWGVGCGRPNRPGVYTNISHHFEWIQKLMAQSGMSQPDPSWPLL

EDEAL PSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG

181 181 241

ð

원 장

120 120 180

9

1 MGARGALLIALLIARAGIRKPESORAPISGPCGRRVITSRIVGGEDAELGRWPWGGSLR
61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF
61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF
61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDSSGWMVQFGQLTSMPSFWSLQAYYTRYF
61 LWDSHVCGVSLLSHRWALTAAHCFETYSDLSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF
61 VWDSHVCGVSLLSHRWALTAAHCFETYSDLSDLSDPSGWMVQFGQLTSMPSFWSLQAYYTRYF

8 8 8 8

ò

MGARGALLLALLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR

9

Gaps

;

5; Length 314; 16; Indels

99.7%; Score 1723; DB 6; 99.7%; Pred. No. 1.7e-146; iive 1; Mismatches 0;

Query Match
Best Local Similarity 99.7
Matches 313, Conservative

301 PPPLLWALPLIGPV 314

```
Human; PRO; secreted protein; transmembrane protein; enterocolitis; gastrointestinal ulceration; skin disease; abnormal keratinocyte differentiation; psoriasis; epithelial cancer; aquamous cell carcinoma, Alzheimer's disease; Parkinson's disease; rheumatophic lateral sclerosis; inflammatory disease; rheumatoid arthritis; asthma; multiple sclerosis; organ failure; atherosclerosis; cardiac injury; infertility; birth defect; disbetic complication; wound repair.
                                                                      Human secreted/transmembrane protein PRO303
                 ABU54391 standard; protein; 314 AA.
                                                                                                                                                                                                                                                      97US-0059113P.
97US-0059117P.
97US-0059117P.
97US-0059121P.
97US-0059122P.
97US-0059268P.
97US-0059266P.
97US-0059266P.
                                                                                                                                                                                                                                                                                                                                                         9705-0062287P
9705-0063486P
9705-0063814P
9705-00638120P
9705-0063120P
9705-0063127P
9705-0063127P
9705-0063128P
9705-0063327P
9705-0063329P
9705-0063329P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9705-0063544P
9705-0063569P
9705-0063564P
9705-0063435P
9705-0063734P
9705-0063734P
9705-0063734P
9705-0063734P
9705-0063738P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97US-0063870P.
97US-0064103P.
97US-0064248P.
97US-0064809P.
97US-0065186P.
                                                                                                                                                                                                                                       18-JUL-2001; 2001US-00909320
                                                     10-MAR-2003 (first entry)
                                                                                                                                                                                                   US2002132240-A1.
                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                          17-OCT-1997;
21-OCT-1997;
24-OCT-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12-NOV-1997;
17-NOV-1997;
                                                                                                                                                                                                                     19-SEP-2002
                                                                                                                                                                                                                                                                                                                                                  7-0CT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1997
                                                                                                                                                                                                                                                                                      7-SEP-1997
                                                                                                                                                                                                                                                                                                                       .8-SEP-1997
                                                                                                                                                                                                                                                                                                                                          5-OCT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28-OCT-1997
                                   ABU54391;
                                                                                                                                                                                                                                                                                                                                                                                                                        1-0CT-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         28-OCT-1
29-OCT-1
                                                                                                                                                                                                                                                                                                                                                                                                                -OCT-1
                                                                                                                                                                                                                                                                                                                                                                                                                                          -OCT-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28-OCT-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29-OCT-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      29-0CT-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                     -001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28-OCT-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29-OCT-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29-OCT-:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29-OCT-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-OCT-
RESULT 15
ABUS4391
```

```
97US-0066511P.
97US-0066770P.
97US-0066772P.
                                                                                                             99WO-US028313.
99WO-US028301.
99WO-US028564.
                                                                                                                                     99WO-US030095.
                                                                                                                                                           2000WO-US003565.
2000WO-US004414.
2000WO-US005004.
                                                                                                                                                                            02-MAR-2000; 2000WO-US005841.
20-MAR-2000; 2000WO-US007377.
30-MAR-2000; 2000WO-US008439.
22-MAY-2000; 2000WO-US014042.
                                                                                                                                                 99WO-US030999
                      97US-0066466P
                                             98WO-US018824
                                                                                                 99WO-US023089
99WO-US028214
                                                                                                                               99WO-US028565
                                                                                                                                                      2000WO-US000219
                                                         98WO-US019330
                                                                                      99WO-US021090
                                                                                                                                                                                                                      2000US-00665350
                                                               98WO-US019437
                                                                                99WO-US020944
                                                                                                                                                                                                                                 (GETH ) GENENTECH INC.
                                                                                                                                    16-DEC-1999;
20-DEC-1999;
20-DEC-1999;
                                                                                                                                                                 22-FEB-2000;
24-FEB-2000;
                                                                          08-SEP-1999;
13-SEP-1999;
15-SEP-1999;
                24-NOV-1997;
24-NOV-1997;
24-NOV-1997;
24-NOV-1997;
                                                                                                                                                            11-FEB-2000;
                                                                                                                                                      36-JAN-2000;
                                                                                                 05-OCT-1999;
29-NOV-1999;
                                                         16-SEP-1998
                                                                                            15-SEP-1999
                                                                                                             30-NOV-1999
                                        24-NOV-1997
```

Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N; Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A; Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ; Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D; Williams PM, Wood WI; Filvaro...
Godowski PJ, Grim

WPI; 2003-147434/14. N-PSDB; ABX71659. New PRO polypeptides and nucleic acid molecules, useful in diagnosing or treating inflammatory diseases, organ failure, atherosclerosis, cardiac injury, infertility, cancer, AIDS, Alzheimer's disease or Parkinson's disease

ö

Claim 12; Fig 92; 473pp; English

The invention relates to an isolated PRO polypeptide having at least 80% amino acid sequence identity to: (a) any one of 61 fully defined amino acid sequence given in the specification (appearing as ABUS4407).

ABUS4407); (b) an amino acid sequence encoded by the nucleotide sequence deposited under American Type Culture Collection (accession numbers isted in the specification); (c) any one of the PRO sequences which lacks its associated signal peptide; (d) an extracellular domain of the PRO polypeptide with its associated signal peptide; or (e) an extracellular domain of the PRO polypeptide which lacks its associated signal peptide. Also include are the nucleic acids encoding the PRO polypeptides and nucleic acids are useful in diagnosing or treating polypeptides and nucleic acids are useful in diagnosing or treating anterocolitis, gastrointestinal ulceration, skin diseases associated with abnormal keratinocyte differentiation, e.g. psoriasis or epithelial cancers such as squamous cell carcinoma, Alzhaimer's disease, Parkinson's disease, amyotrophic lateral sclerosis, inflammatory diseases.

us-10-040-647-6.rag

```
cr rheumatoid arthritis, asthma or multiple sclerosis, organ failure, atherosclerosis, cardiac injury, infertility, birth defects, premature alonging, AIDS, cancer, diabetic complications, or mutations in general. The polypeptides are also useful for wound repair and associated therapies concerned with re-growth of tissue. The mucleotide sequences may be used as hybridisation probes in chromosome and gene mapping, or in generating cutisense RNA and DNA. PRO nucleic acids are also useful in preparing PRO polypeptides, in assays to identify other proteins or molecules involved in building reaction, to generate transgenic animals or knockout animals, which in turn are useful in the development and screening of therapeutically useful reagents, for chromosome identification, and therapeutically useful reagents, for chromosome identification, and useful in gene therapy, and as molecular weight markers for protein electrophoresis purposes. The anti-PRO antibodies may be used in ecombinant cell culture or natural sources. The present sequence
            %X3GGGGGGGGGGGGGGGG
```

Sequence 314 AA;

0; Gaps 99.7%; Score 1723; DB 6; Length 314; 99.7%; Pred. No. 1.7e-146; Live 1; Mismatches 0; Indels C Query Match Best Local Similarity 99.7' Matches 313; Conservative ò

1 MGARGALILALILARAGIRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR 60 1 MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSLR

셤

g

ò g ð

à

VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGMGYIK 180 EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG 240 121 VSNIYLSPRYLGNSPYDIALVKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIK 180 EDEALPSPHTLQEVQVAIINNSMCNHLFLKYSFRKDIFGDMVCAGNAQGGKDACFGDSGG 240 181

181

g

ð

FFPLLWALPLLGPV 314 301

ò

Search completed: February 27, 2005, 20:22:32 Job time: 118.374 secs

25 444.2 40.4 510 4 BM759973 BM759973 K-EST0040 2 26 441.6 40.1 462 1 A1016399 CR735731 CR735	ALIGNMENTS	N N N N N N N N N N N N N N N N N N N	http://fulllength.invitrogen.com/ InvitroGe Faraday Avenue 2 (bases 1 to 1077) Genoscope. Direct Submission	Submitted (20-JUL-2004) Genoscope - Centre National de Sequence BP 191 191006 EVRY cedex - FRANCE (E-mail : seqref@genoscope.cns - Web : www.genoscope.cns.fr) 1st strand cDNA was primed with a Not1-oligo(dT) primer. Five p end entriched, double-strand cDNA was digested with Not I and Col into the Not I and ECOR V sites of the pCWVSPORT 6 vector. Libr was normalized. Library was constructed by Life Technologies, division of Invitrogen. 1. 1077 Corganism="Homo sapiens" Corganism="Homo sapiens"	Db 3 CGCGGGAGAGGCCCATGGGCGCGCGGGGGCGCTGCTGCTGCTGCTGCTGCTGCTCG 62
GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd. OM nucleic - nucleic search, using sw model Run on: March 4, 2005, 22:14:12; Search time 4246.77 Seconds (without alignments) 9859.425 Million cell updates/sec Title: US-10-040-647-5 Perfect score: 1100 Sequence: 1 CGCGGACAGGACGCCATGGAAAAAAAAAAAAAA	Minimum DB seq length: 0 Maximum DB seq length: 2000000000 Post-processing: Minimum Match 0% Maximum Match 100% Tiething first AE commanies	stl:*	SUMWARIES \$ Query ore Match Length DB ID	100 200 200 200 200 200 200 200 200 200	464.8 42.3 479 1 AA448095 AA448095

셤 ò 유 ò g ò 요 ò

```
Score 1012.4; DB 3;
Pred. No. 1.3e-243;
0; Mismatches 1; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                      CR605277.1 GI:50486084
HTC; CNSLT_CDNA.
HOmo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 92.0%;
Best Local Similarity 99.9%;
Matches 1013; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                  (bases 1 to 1014)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .1014
                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                             Genoscope.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                     ORGANISM
DEFINITION
                                              ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                 REFERENCE
AUTHORS
TITLE
JOURNAL
REMARK
                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      961 AGCCTACCTGAGCCCATGCGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 960
                                                                            122
                                                                                                                             180
                                                                                                                                                                                   182
                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                     242
                                                                                                                                                                                                                                                                                                                                         300
                                                                                                                                                                                                                                                                                                                                                                                          302
                                                                                                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                902
                           GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         963 AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG
                                                      GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCG
                                                                                                                                                             ACGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCCGAACTCGGGCGTTGGCCGTG
                                                                                                                                                                                                                                                                                                                                                                            CTGGGCACTCACGGCGCGCACTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTATGACATTGCCTTGGTGAAGCTGTCTGCAGCCTGTCACCTAAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGTGAGCTGGGGAGTGGGCTGGGCCCCAATCGGCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTCCTGGCCGCTACTCTTTTCCCTCTTCTCTGGGCTCTCCCCACTCCTGGGGCCCGGTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTCCTGGCCGCTACTCTTTTTCCCTCTTTCTCTGGGCTCTCCCCACTCCTGGGGCCCGGTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACGGGTCATCACGTCGCGCTCGTGGAGAGGACGCCGAACTCGGGCGTTGGCCGTG
                                                                                                                                                                                                                                    GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                                                                                                                                                     GCAGGGGAGCCTGCCGCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCCAGCCACCG
                                                                                                                                                                                                                                                                                                                                              CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gradaricarinadocadoridacinos areconocinos as a secondo de consecuencia de conse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cracacecerraciregraregaararerarergaeeeereeeraeeraeeaaarreaee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCTCGCCATCATAAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cegreacricaegregaccerrescereraacaagaaregacrereracaarregagr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGTGAGCTGGGGAGTGGGCTGTGGTCGGCCCAATCGGCCCCGGTGTCTACACACAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CGGTGACTCAGGTGGACCCTTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT
                                                                              63
                                                                                                                               121
                                                                                                                                                                                   123
                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                     183
                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                            243
                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          423
```

g

ð 셤 ò 셤 à

g

8 g δ 유

셤

à

8

8

g

g

ò 요 à g ò g ò

ð

HTC 21-JUL-2004

linear

mRNA

1014 bp

CR605277

RESULT 2 CR605277 LOCUS

Direct Submission
Submitted (20-JUL-2004) Genoscope - Centre National de Sequencage :
BP 191 91006 EVRY cedex - FRANCE (E-mail : seqref@genoscope.cns.fr

BP 191 91006 EVRY cedex - FRANCE (E-mail : seqref@genoscope.cns.fr

1st strand cDNA was primed with a NotI-oligo(dT) primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoR V sites of the pCMVSPORT 6 vector. Library was normalized. Library was constructed by Life Technologies, a division of Invitrogen. full-length cDNA clone CSODK002YM07 of HeLa cells Cot 25-normalized of Homo sapiens (human). CR605277 ö 122 360 120 182 180 242 240 302 300 362 422 420 480 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
In Chases 1 to 1014)
Li, W.B., Gruber, C., Jessee, J. and Polayes, D.
Pull-length colona libraries and normalization
Unpublished
Contact: Feng Liang Email: fliang@lifetech.com URL:
http://fulllength.invitrogen.com/ InvitroGen Corporation 1600
Faraday Avenue 9 CTGGACTCAGGAAGCCGGAGTCGCAGGAGGGGGCGCCGTTATCAGGACCATGCGGCCGAC 241 GGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGACCTTAGTGACCTTAGTGACCTTAGTGACCTTAGTGACCTTAGTGACCTTAGACCTTAGTGACCTTAGACCTTAGTAGCTTAGTAGCTTAGTAGCTTAGACCTTAGACCTTAGACCTTAGACCTTAGACTTAGACCTTAGACCTTAGACCTTAGACCTTAGACCTTAGACCTTAGACCTTAGACCTTAGACTTAGACCT 361 ACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACCCT ATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTAAAACACACATCCAGCCCA 63 CTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCGAC 123 GGGTCATCACGTCGCGCATCGTGGAGGACGCCGAACTCGGGCGTTGGCCGTGGC GGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGGGT 301 ggargerccagrirgeccagcreacriccareccarccricgeagccrecaegcracr ATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTAAACACATCCAGCCCA 183 AGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCGCT GGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTACT ACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACCCT Gaps Length 1014; ; 0 /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="texon:9606"
/tlone="CSODK002YM07"
/tissue type="Hela cells Cot 25-normalized"
/plasmid="pCMVSPORT_6" Indels 123 421 8

873 203 813 263 753 323 693

셤

유 8 g ઠે 유 à 요 ∂ 요

ð

셤

ò 셤 8 셤

ઠ

```
| 1986 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGGCACTGCCATCTCCCCACACCCTCCAGGAAGTTCAGGTCGCCATCATAAACAACTTCTA 393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGTCGTGAGCTGGGGGAGTGGGCTGTG 803
/cell_line="HELA"
/clone_lib="Homo sapiens HELA CELLS COT 25-NORMALIZED"
/note="lst strand cDNA was primed with a NotI-oligo(dT)
primer. Five prime end enriched, double-strand cDNA was
digested with Not I and cloned into the Not I and EcoR v
sites of the pCMVSPORT 6 vector. Library was normalized.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        <u> AGCTGATGGCCCAGAGTGGCGTGTCCCAGCCAGACCCCTCCTGGCCGCTACTCTTTTTCC</u>
                                                                                                                                                                                                                                                                                                                                               TGTCTGCACCTGTCACCTACACTAACACATCCAGCCCCATCTGTCTCCAGGCCTCCACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGTCTGCACCTGTCACCTACACTAAACACATCCAGCCCATCTGTCTCCAGGCCTCCACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGGGGGGTACATCAAAGAGGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAAGGACATCTTTGGAGACATGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTTCGGTAACTCAGGTGGACCCTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCTGTAACAAGAATGGACTGTGGTATCAGATTGGAGTCGTGGGCTGGGGAGTGGGGTTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTCGCCCCAATCGGCCCCGGTGTCTACACCAATATCAGCCACCACTTTGAGTGGATCCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAGCCACCACTTTGAGTGGATCCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGCTGATGGCCCAGAGTGGCATGTCCCAGCAGACCCCTCCTGGCCGCTACTCTTTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTCTTCTCTGGGCTCTCCCACTCCTGGGGCGGGTTCTGAGCCTACCTGAGCCCATGCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTCTTCHCTGGGCTCTCCCCACTCCTGGGCCGGTCTGAGCCTACCTGAGCCCATGCAGCC
                                                                                                                                                                                                                                                                                                                 CGCAGGAGGCGCCGCTTATCAGGACCATGCGGCCGACGGGTCATCACGTCGCGATCG
                                                                                                                                                                                                                                                                                                                                                                                                                        TGGGTGGAGAGGACGCCGAACTCGGGCGTTGGCCGTGGCAGGGGAGCCTGCGCCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGGGTGGAGAGACGCCGAACTCGGCGTTGGCCCGTGGCAGGGAGCCTGCGCCTGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACGCTGGGAACTCACGGCGCGCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGGGTGGATGGTCCAGTTTGGCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACCCTATGACATTGCCTTGGTGAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGGCACTGCCATCTCCCCACACCTCCAGGAAGTTCAGGTCGCCATCATAAACAACTTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAAGGACATCTTTGGAGACATGGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGCTGCCAATGCCCAAGGCGGGAAGGATGCCTGCTTCGGTGACTCAGGTGGACCCTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGGGTGGATGGTCCAGTTTGGCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACCCTATGACATTGCCTTGGTGAAGC
                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                          Length 932;
                                                                                                                                                                                                       Score 908.4; DB 1; Length
Pred. No. 2e-217;
5; Mismatches 8; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     984 TGGGGCCACTGCCAAGTCAGGCC 1006
                                                                                                                                                                                                          Sch
1 Similarity 98.6%;
910; Conservative
                                                                                                                                                                                                             Query Match
Best Local S
Matches 910
                                                                                                                                                                                                                                                                                                                                                                                                                        144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 924
                                                                                                                                                                                                                                                                                                                    84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  624
                                                                                                                                                            ORIGIN
                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      $ 8 $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6 6 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 음 강
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Contact: Genoscope denoscope - Centre National de Sequencage 2 rue Gaston Cremieux, CP 5706 - 91057 ENRY cedex - FRANCE Email: seqrefégenoscope.cns.fr, Web : www.genoscope.cns.fr lst strand cDNA was primed with a NotI-oligo(dT) primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoR V sites of the pCMVSPORT 6 vector. Library was normalized. Library was constructed by Life Technologies, a division of Invitrogen. This sequence belongs to sequence cluster
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  902
                                                                                                                                                          9
                                                                                                                                                                                                                                                                                                                                                                 720
                                                                                                                                                                                                                                                                                                                                                                                                                        782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            960
  542
                                                      540
                                                                                                      602
                                                                                                                                                                                                             662
                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                 722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCTGGCCGCTACTCTTTTCCCTCTTCTCTGGGCTCTCCCACTCCTGGGGCCCCGGTCTGAG 962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.

1. (bases 1 to 932)

Li, W.B., Gruber, C., Jessee, J. and Polayes, D.

Full-length cDNA libraries and normalization

Unpublished (2001)

On Feb 16, 2001 this sequence version replaced gi:31316478.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AL578261 Homo sapiens HELA CELLS COT 25-NORMALIZED Homo sapiens con 3-NORMALIZED Homo sapiens AL578261
                                                                                                                                                                                                                                                                                                                                            541 GGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCCACACCCTCCAGGAAGTTCAGG
                                                                                                                                                                                                                                        TCGCCATCATAAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGACTCAGGTGGACCCTTGGCCTGTAACAAGAATGGACTGTGGTATCAGATTGGAGTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGAGCTGGGGAGAGTGGGTCTGTGGTCGGCCCAATCGGCCCGGTGTCTACACCCAATATCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCTGGCCGCTACTTTTTCCCTCTTTCTCTGGGCTCTCCCCACTCCTGGGGCCGGTCTGAG
                                                      TCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGGTGACTGGCT
                                                                                                            GGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCCACACCCTCCAGGAAGTTCAGG
                                                                                                                                                                                                             TCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAAGG
                                                                                                                                                                                                                                                                                                                 ACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTTCG
                                                                                                                                                                                                                                                                                                                                                                                                                        GTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGAGCTGGGGAGTGGGCTGTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     For more information about this cluster, see http://www.genoscope.cns.fr/cdna?s=CSODK002AG04NP1&c=8290.f. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cell_type="HELA CELLS COT 25-NORMALIZED"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="CSODK002YM07"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AL578261.3 GI:46257165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                        481
                                                                                                         543
                                                                                                                                                                                                             603
                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                 663
                                                                                                                                                                                                                                                                                                                                                                    661
                                                                                                                                                                                                                                                                                                                                                                                                                        723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AL578261/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
```

513

633 443 573 503 453

623

683 333 743 273 213 863 153 923

983 93

33

421

480 541 540

481

009

601

099

721

661

720

781 780 841 840

```
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

13. (Dases 1 to 1057)

14. (Dases 1 to 1057)

15. Li, W.B., Gruber, C., Jessee, J. and Polayes, D.

16. Full-length cDNA libraries and normalization

17. Inpublished (2001)

18. On May 13, 2003 this sequence version replaced gi:30654423.

19. Contact: Genoscope

2 rue Gaston Cremieux, CP 5706 - 91057 ENRY cedex - FRANCE

2 rue Gaston Cremieux, CP 5706 - 91057 ENRY cedex - FRANCE

Email: seqref@genoscope.cns.fr. Web: www.genoscope.cns.fr

18t strand cDNA was primed with a NotI-oligo(dT) primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoRV sites of the pCWVSPORT 6 vector. Library was not normalized. Library was constructed by Life Technologies, a division of Invitrogen.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BX417595 100-MAY-2004
BX417595 Homo sapiens PLACENTA Homo sapiens CDNA clone CSODE010YP05
5-FPIME, MENA sequence.
BX417595
301 TGGATGGTCCAGTTTGGCCAGCTGCATCCTTCTTGAGGCCTGCAGGCCTAC 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               541 reseseracarcaaasasasasareassasasasareassaretessasasasasasasas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             601 Greecearcarahadaherererargreeaheereererreereaheragracherreegahe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         661 GACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGAAGGATGCCTGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 721 GGTGACTCAGGTGGACCCTTGGCCTGTAACAAGAATGGACTGTGGTATCAGATTGGAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         782 GTGAGCTGGGGAGTGGGCTGTGGTCGGCCCATCGGCCCGGTGTCTACACCAATATCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                542 TGGGGGTACATCAAAGAGGATGAGGCACTGCCCATCTCCCCACACACCTCCAGGAAGTTCAG
                                                                                                        362 TACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACCC
                                                                                                                                           361 TACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACCC
                                                                                                                                                                                                                                                                                    481 ATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      662 GACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    722 GGTGACTCAGGTGCACCCTTTGGCCTGTAACAAGGATGCACTGTGGTATCAGATTGGAGTC
                                                                                                                                                                                                                                          422 TATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCCC
                                                                                                                                                                                                                                                                                                                                                                               482 ATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This sequence belongs to sequence cluster 8290.f

For more information about this cluster, see

http://www.genoscope.cns.fr/cdna?s=CSODE010CH03QP1&c=8290.f.

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             841 CACCACTTTGAGTGGATCCAGAAGCTGATGGCCCAGAGTGGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          842 CACCACTTTGAGTGGATCCAGAAGCTGATGGCCCCAGAGTGGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Homo sapiens"
/mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BX417595.2 GI:46933208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 5
BX417595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                    셤
                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            our publishment and this sequence version replaced gi:31277675. Contact: Genoscope Contac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1;
                                                                                                                                                                                                          EST 30-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/coll_type="CSODK002YM07"
/cell_type="HELA CELLS COT 25-NORWALIZED"
/cell_type="HELA CELLS COT 25-NORWALIZED"
/coll_tip="HELA"
/clone_lib="Homo sapiens HELA CELLS COT 25-NORWALIZED"
/note="lst strand cDNA was primed with a NotI-oligo(dT)
primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EORR V sites of the pCMVSPORT 6 vector. Library was normalized."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       63 CTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGT-TATCAGGACCATGCGGCCGA 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241 resecacicacedesescaciecrireaaacciarastescrirasicarectecese 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTAC 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
1 (bases 1 to 884)
Li, W.B., Gruber, C., Jessee, J. and Polayes, D.
Full-length cDNA libraries and normalization
Unpublished (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                  AL555870 Homo sapiens HELA CELLS COT 25-NORMALIZED Homo sapiens CDNA clone CS0DK002YM07 5-PRIME, MRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCGAACTCGGGCGTTGGCCGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121 CGGGTCATCACGTCGCGCATCGTGGGTGGAAGGACGCCCGAACTCGGGCGTTGGCCGTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181 CAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     For more information about this cluster, see http://www.genoscope.cns.fr/cdna?s=CSODK002AG04QP1&c=8290.f. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 79.1%; Score 870.4; DB 1; Length 884; 99.8%; Pred. No. 7.1e-208;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
   AL555870.3 GI:45860593
                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity 99.8
Matches 882; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                      32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                         ACCESSION
                                                                                                                                                                                                                                                                                                                                        VERSION
KEYWORDS
SOURCE
                                                                                                                                        RESULT 4
ALSS5870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORIGIN
```

g

à

원 ò

8

ò g à 요. &

ਨੇ 셤 ઠે 셤 ઠે g Š 셤 ઠે 셤 ò 요 ઠે 용 ò 셤 ò g ઠે 셤 8 g ò 요 ò

```
/mol_type="mtNA"
/db_xref="taxon:9606"
/db_xref="taxon:9606"
/clone="CSODE010YPO5"
/clone lib="Homo sapiens PLACENTA"
/note="Vector: pCMVSPORT 6; 1st strand cDNA was primed with a NotI-oligo(dT) primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoRV sites of the pCMVSPORT 6 vector. Library was not normalized."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Genoscope - Centre National de Sequencage
2 rue Gaston Cremieux, CP 5706 - 91057 ENYZ cedex - FRANCE
Email: segref@genoscope.cns.fr. Web : www.genoscope.cns.fr
1st strand cDNA was primed with a NotI-oligo(dT) primer. Five prime
end enriched, double-strand cDNA was digested with Not I and cloned
into the Not I and EcoRv sites of the pCMVSPORT 6 vector. Library
was not normalized. Library was constructed by Life Technologies, a
                                                                                                                                                                                                                                                                                                                                                                                    BX454526 BX454526 Homo gapieng PLACENTA Homo gapieng cDNA clone CS0DE010YP05 3-PRIME, mRNA sequence.
                                                                                        Homo sapiens (human)
Memo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
   concordeccentativity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGGGAGCCTGCGCCTGTGGGATT--CCCACGTATGCGGAGTGA-GCCTGCTCAGCCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           893 GGAAACCCGGCGCCTTTGGGATTTCCCCCGTATGCGAAGTGAGGCTTGCTCAGGCCCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         833 Treesecarcreesecececerrecrreanacerarsarerearcranguese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             713 TTACTACACCGTTCTTTCGTATCGAATATCTGAGCCCTCGCTACCTGGGGAATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241 CT-GGGCACTCACGGCGG-CGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGGTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -TACTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGGAATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       division of Invitrogen.
This sequence belongs to sequence cluster 8290.f
For more information about this cluster, see
http://www.genoscope.cns.fr/cdna?s=CSOBAK026CB01NM1&c=8290.f.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 780.6; DB 5; Length 898;
Pred. No. 2.8e-185;
0; Mismatches 24; Indels 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 (bases 1 to 898)
Li,W.B., Gruber,C., Jessee,J. and Polayes,D.
Full-length CDNA libraries and normalization
Unpublished (2001)
                                                                                                                                                                                                                                     981
                                                                                                                                                                              960 GAGCCTACCTGAGCCCATGCAGCCTGGG 987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
                                                                                                                                                                                                            954 TGAGCTWACTGAGCCWATGCASCTGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BX454526
BX454526.1 GI:31019139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 96.5%;
Matches 862; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Contact: Genoscope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      299
                                                             900
                                                                                                                    900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                          RESULT 6
BX454526/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PEATURES
                                                                                                 g
                                                                                                                                                                        8
                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                          Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠ
                  /Glone="CSODEGIOYPOS"
//close_Type="PLACENTA"
/close_Tib="Homo sapiens PLACENTA"
/note="Vector: pCMVSPORT 6; lst strand cDNA was primed
with a NotI-oligo(dT) primer. Five prime end enriched,
double-strand cDNA was digested with Not I and cloned into
the Not I and ECRAV sites of the pCMVSPORT 6 vector.
Library was not normalized."
                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCCTNTATCAGGACCATGCGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GACGGGTCATCACGTCGCGCATCGTGGGTGGAGAGGACGCCGAACTCGGGCGTTTGGCCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGCAGGGGAGCCTGCGCCTGTGGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCTATGACATTGCCTTGGAGGTGTCTGCACCTGTCACCTACACTAAACACATCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGTTGAGACGGACAGACTGCTGGCGGCTGACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGGTCGCCATCATAAACAACTCTATGTGC-ACCACCTCTTCCTCAAGTACAGTTTCCGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CGCGGGAGAGGAGGCCATGGGCGCGCGCGGGCGCTGCTGCTGCTGCTGCTGCTGCTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGCTGGACTCAGGAGCCGGAGTCGCAGGAGCCGCCCGT-TATCAGGACCATGCGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GACGGGTCATCACGTCGCGCATCGTGGGTGGAGAGACGCCGAACTCGGGCGTTGGCCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGTGGATGGTCCAGTTTGGCCAGGTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGGAATTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      constrate and contrate and contr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ccarcreterecedecerecaetrreagrireagaacegaeagaeregereg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCTCCAGGAAGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCTGGGGGTACATCAAAGAAGATGAGGCACTGCCATCTCCCCACACCCTCCAGGAAGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A-GACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGAAGGATGCCTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCGTGAGCTGGGGGTGGGTCGGCCCCAATCGGCCCGGTGTCTACACCAATATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                    10;
                                                                                                                                                                                                                                                                                                                    Length 1057
                                                                                                                                                                                                                                                                                                                                                                              23; Indels
                                                                                                                                                                                                                                                                                                                 78.7%; Score 866; DB 5; L
95.3%; Pred. No. 9.4e-207;
cive 13; Mismatches 23;
xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity 95.3%
Matches 942; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                             ORIGIN
```

ŝ

240 834 298 774 417 654

요

ઠ 용

유 8 g ò g ð ద ò g ∂ 셤 ò

ઠ

```
1024
                                                                                                                                                                                                                                                                                                                                                            Š
                                  /organism="Homo sapiens"
/organism="Homo sapiens"
/db Xref="taxon:9606"
/db Xref="taxon:9606"
/clone="IMAGE:5139509"
/tissue type="cervical carcinoma cell line"
/lab_hogt="DH108"
/clone lib="NHH MGC 12"
/note="Organ: cervix; Vector: pCMV-SPORT6; Site_1: NotI;
Site_2: Sal1; Cloned unidirectionally. Primer: Oligo dT.
Average insert size 1.4 kb. Library prepared by Life
Technologies."
                                                                                                                                                                                                                                                                                                                                                                                                   245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        654
                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TACCTGAGCCCATGCAGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTGTGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                             1 GGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCGCTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             355 GGTACATCAAAGAGATGAGGCACTGCCATCTCCCCACACCTCCAGGAAGTTCAGGTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 415 CCATCATAAACACACTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAAGGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      726 ACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGG-AGTCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGGCCGCTACTCTTTTCCCTCTTCTGGGCTCTCCCACTCCTGGGGCCGGTCTGAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTACTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCCGTTACTTCGTATCGAATATCTGTGTGCCCTCGCTACCTGGGGAATTCACCCTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAAGGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTTCGGTG
                                                                                                                                                                                                                                                                                                                                                                                                   GGAGCCTGCGCCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCGCTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 246 CACTCACGCCGCCACTCCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGGGTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACATTGCCTTGGTGAAGCTGTCTGCACCTACACCTAAAACACATCCAGCCCATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             235 ACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAACACATCCAGCCCATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACCCTCCAGGAAGTTCAGGTCG
                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                          10;
                                                                                                                                                                                                                                                                                                                Score 777.2; DB 4; Length
Pred. No. 2e-184;
0; Mismatches 8; Indels
cocation/Qualifiers
                                                                                                                                                                                                                                                                                                              ch 70.7%;
al Similarity 97.9%;
842; Conservative
                                                                                                                                                                                                                                                                                                                Query Match
Best Local S:
Matches 842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                . 999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     965
                                                                                                                                                                                                                                                                                                                                                                                                     186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          486
FEATURES
                                                                                                                                                                                                                                                                           DRIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                      요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                       ଚ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BI334059

871 bp mRNA linear EST 30-JUL-2001
602997320F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:5139509 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCTGAGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCT 1016
                                                                                                                                                                                                                                                                           929
                                                                                                                                                                                                                                                                                                                  414
                                                                                                                                                                                                                                                                                                                                                            716
                                                                                                                                                                                                                                                                                                                                                                                                                                          776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCCTCCTGGCCGCTACTCTTTTCCCTCTTCTCTGGGCTCTCCCACTCCTGGGGCCGG 956
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          114
                                                            594
                                                                                                      536
                                                                                                                                             534
                                                                                                                                                                                         596
                                                                                                                                                                                                                                  474
                                                                                                                                                                                                                                                                                                                                                                                                     354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryotta, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalla, Butheria, Primates, Catarrhini, Hominidae, Homo.

Mammalla, Butheria, Primates, Catarrhini, Hominidae, Homo.

I (bases 1 to 871)

NH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapba-r@mail.nih.gov

Tissue Procurement: ATCC
                 | A-CCCTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACCTACACCTACACCTCC
                                                                                                    CTGGCTGGGGGTACATCAAAGAGGATGAGGCACTGCCCATCTCCCCACACCCTCCAGGAAG
                                                                                                                                                                                                                                                                                               TTCAGGTCGCCATCATAAACAACTCTATGTGCAACCACCTTCCTCAAGTACAGTTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCTTCGGTCACCTCAGGTCGACCCTTTGCCCTGTAACAAGAATGGACTGTGGTATCAGATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             constitution in the second section of the second section of the second section of the second section of the sec
                                                          accichargacarraccrragrangerererecaccreaccracacranancacarcc
                                                                                                                                                                                         CTGGCTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACACCACCAGGAAG
                                                                                                                                                                                                                                                                           TTCAGGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCC
                                                                                                                                                                                                                                                                                                                                                            GCAAGGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCCAAGGCGGGAAGGATGCCT
                                                                                                                                                                                                                                                                                                                                                                                  GCAAGGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                            GCTTCGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGTCGTGAGCTGGGGGTGGCTGTCGGCCCAATCGGCCCCGGTGTCTACACCAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAGTCGTGAGCTGGGGAGTGGGCTGTGGTCGGCCCAATCGGCCCGGTGTCTACACCAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCTGTCTTGTTTGGTAATAAACACATTCCAGTTGATGCCTTGCAGGGCATTTT 1069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BI334059.1 GI:15018703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            mRNA sequence.
BI334059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                   413
                                                            653
                                                                                                    477
                                                                                                                                             593
                                                                                                                                                                                      537
                                                                                                                                                                                                                                  533
                                                                                                                                                                                                                                                                           597
                                                                                                                                                                                                                                                                                                                  473
                                                                                                                                                                                                                                                                                                                                                            657
                                                                                                                                                                                                                                                                                                                                                                                                                                            717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1017
                     418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BI334059
LOCUS
```

RESULT

셤

8

අ. දු

유

셤

ઠે

셤

à

607

487

us-10-040-647-5.rst

ઠે 셤

```
1. .878
| / organism="Homo sapiens" |
| / organism="Homo sapiens" |
| / mol_type="mRNA" |
| / db xref="taxon:9606" |
| / clone="InAdE:5165562" |
| / tissue_type="mednila" |
| / tissue_type="mednila" |
| / tab host="H9H108" |
| / clone=lib="NHH MGC_119" |
| / clone=lorgan: brain; Vector: pCMV-SPORT6; Site_1: Not1; |
| / note="Organ: brain; Vector: pCMV-SPORT6; Site_1: Not1; |
| / site_2: EcoRV (destroyed); RNA source normal medulla from anonymous male age 27. Library is oligo-dT primed and directionally cloned (EcoRV site is destroyed upon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Bukaryota; Metazoa; Chordata; Catarrhini; Hominidae; Homo.

E 1 (Bases 1 to 878)

I (Bases 1 to 878)

NIH-MGC http://mgc.nci.nih.gov/.

L Onpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Life Technologies, Inc.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Preparation: Life Technologies, Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

High quality sequence etop: 828.

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        878 bp mRNA linear EST 04-OCT-2001
60303575F1 NIH_MGC_119 Homo sapiens cDNA clone IMAGE:5165562 5',
B1827608
                                                                                                                                                                                                                                          481 TACATCAAAGAGATGAGGCACTGCCATCTCCCCACACCTCCAGGAAGTTCAGGTCGCC 540
                                                                                                                                                                                                                                                                                                                                                                                                               541 ATCATABAACAACTCTATGTGCAACCACTCTTCCTCAAGTACAAGTTTCCGCAAGGACATC 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          601 TTTGGAGACATGGTTTGTGCTGGCAAGGCGGGAAGGATGCCTGCTTCGGTGAC 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGTTACTTCGTATCGAATATCTTATCTGAGCCCTCGCTACCTGGGGGAATTCACCCTATGAC 427
                                              301 CGTTACTTCGTATCGAATATCTTGAGCCCTCGCTACCTGGGGAATTCACCCTATGAC 360
                                                                                                                                                                                                                                                                                                                                                                                    ATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAAGGACATC 667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTTCGGTGAC 727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGTCGTGAGC 787
                                                                                                ATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACAACACATCCAGCCCATCTGT
                                                                                                                                          361 ATTGCCTTGGTGAAGCTGTCTGCTCTCTACACTAAACACATCCAGCCCATCTGT
                                                                                                                                                                                                                                                                                           TACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCCTCCAGGAAGTTCAGGTCGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     721 TGGGGAGTGGGCTGTGGTCGG-CCAATCGGCCCGGTGTCTACACCAATATCAGC 773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOGGOAGTOGGCTCTCGCCCCAATCGGCCCCGGTGTCTACACCAATATCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BI827608.1 GI:15939145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EST.
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           661
    368
                                                                                                428
                                                                                                                                                                                             488
                                                                                                                                                                                                                                                                                         548
                                                                                                                                                                                                                                                                                                                                                                                    608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 9
BI827608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 · පු
                                            유
                                                                                                8
                                                                                                                                名
                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                              용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BI259237 777 bp mRNA linear EST 17-JUL-2001
602970095F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:5109695 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                I. Dases 1 to ///)

S NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapba-r@mail.nh.gov

Tissue Procurement: ATCC

CDNA.Library Preparation: Life Technologies, Inc.

CDNA.Library Prayed by: Incyte Genomics, Inc.

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LiNL at:

http://image.llnl.gov

Plate: LiAMill.65 row: m column: 24

High quality sequence stop: 777.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 ATCACGTCGCGCATCGTGGGTGGAGAGGACGCCGAACTCGGGCGTTGGCCGTGGCCAGGGG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121 AGCCTGCGCCTGTGGGGTTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACGGTGGGCA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTCCAGTTTGGCCAGCTACCATGCCATCCTTCTGGAGCCTGCAGCCTACTACACC 300
774 TAACTGAGCCCATGCAGCCTGGGCCCACTG-CAAGTCCAGGCCTGGTTCTTCTGACTT 832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           68 CTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCCGACGGGTC 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      128 ATCACGTCGCGCATCGTGGGGGGGAGGACGCCGAACTCGGGCGTTGGCCGTGGCAGGGG 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  188 AGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCGCTGGGCA 247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               248 CTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGGGTGCATG 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTCACGGCGCCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGGGTGGATG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GICCAGTITGGCCAGCTGCCATGCCATCCTTCTGGAGCCTGCAGGCCTACTACACC 367
                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
1 (bases 1 to 777)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCTTATCAGGACCATGCGGCCGACGAGTC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           69.1%; Score 760.4; DB 4; Length 777; 99.7%; Pred. No. 3.3e-180; Live 0; Mismatches 1; Indels 1.
                                                 1025 GTTTGGTAATAAACACATTC 1044
                                                                            BI259237.1 GI:14816376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Technologies."
                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity 99.7
Matches 772; Conservative
                                                                                                                                                                                                                                                             mRNA sequence.
BI259237
                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                RESULT 8
BI259237
LOCUS
                                                                                                                                                                                                                                                                                      ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORIGIN
윱
```

g

원 ò g 8 셤 Š

```
CB529999 143 bp mRNA linear EST 05-AUG-2004 UI-H-FT2-bji-b-24-0-UI.sl NCI CGAP_FT2 Homo sapiens cDNA clone UI-H-FT2-bji-b-24-0-UI 3', mRNA sequence.
                                                                                                                                                                                     Homo sapiens (human)
   868 GGCTCTTCCA 877
                                                                                                                                                                                                        Homo sapiens
                                                                                                                                      CB529999
                                                  RESULT 10
CB529999/c
                                                                                  LOCUS
                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                   JOURNAL
COMMENT
                                                                                                                                    ACCESSION
                                                                                                                                                  VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
   셤
cloning). Average insert size 1.3 kb, insert size range 0.9-3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 013. Note: this is a NIH MGC Library."
                                                                                                                                                      7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGACAGACTGCTGGGTGACTGGCTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTC 578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          815
                                                                                                                                                                                                                                                     CGTTATCAGGACCATGCGGCCGACGGGTCATCACGTCGCGCATCGTGGGGTGGAGAGGACG 158
                                                                                                                                                                                                                                                                      CCGAACTCGGGCGTTGGCCGTGGCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCG 218
                                                                                                                                                                                                                                                                                                                                                                                                                                                      338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         235 -TGACCTTAGTGATCCCTCCGGGTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCAT 293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTCGCTACCTGGGGAATTCACCCTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCA 413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCTACACTAAACACACCAGCCCATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACC 518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          628 AAGGCGGGAAGGATGCCTGCTTCGGTGACTCAGGTGGACCCTTGGTAACAAGAAT 687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        867
                                                                                                                                                                                                                                                                                                                                                   121 ccaacrcaaca-radcaracaaaaaccraaacaraaaarracaarracaararaca 179
                                                                                                                                                                                                                                                                                                                                                                                      GAGTGAGCCTGCTCAGCCACCGCTGGGCACTCACGGCGGCGCACTGCTTTGAAACCTATA 278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGGCGGGAAGGATGCCTGCTTCGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGÅ-- 756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         688 TGGACTGTGGTATCAGGATGGAGTCGTGAGCTGGGGAGTGGGCTGTGGTCGGCCCAATTC 747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGAGIGGCATGTCCCAGCCAG-ACCCCTCCTGGCCGCTACTCTTTTTCCCTCTTCTCTG 933
                                                                                                                                                                                      86
                                                                                                                                                                                                                     9
                                                                                                                                                                                                        TGCTGGCGCTGCTGGCTCGGGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCTACACTATAAACACATCCAGCCCATCTGTCTCTCAGGCCTCCACATTTGAGTTTTGAGAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCCCCGGIGTCTACACCCAATATCAAGCACCACTTTGAGTTGGATCCAGAAGCTGATGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGAGIGGCCATGTCCAGGCAGAACCCCTCCTGGCCACTATTCTTTTTCCCTCATCTCTG
                                                                                                                                                                                     39 TGCTGGCGCTGCTGCTGGCTCGGGCTGGACTCAGGAAGCCGGAGGTCGCAGGAGGCGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                     GAGTGAGCCTGCTCAGCCACCGCTGGCCACTCACGCCGCGCCCACTGCTTTGAAAC----
                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGACCTTAGTGATCCCTCCGGGTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCTTCTGGAGCCTGCAGGCCTACTACACCCGTTACTTCGTATCGAATATCTGAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTCGCTACCTGGGGAATTCACCCTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGACAGACTGGGTGACTGGCTGGGGGGAACATCAAAGAGAGATGAG-------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       579 CCCACACCTCCAGGAGGTCAGCCATCATAAACAACTCTATGTGCAACCACCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -------GGAAGTTCAGGTCGCCATCATAAACAACTCTATGTGCAACCACCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        639 TCCTCAAGTACAGTTTCCGCAAGGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGGACTGTGGTATCAGATTGGAGTCGTGAGCTGGGGAGTGGGCTGTGGTCGGCCCAA-TC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGCCCGGTGTCTACACCAATATCAGCCACCACTTTGAG-TGGATCCAGAAGCTGATGGCC
                                                                                                                                                      38; Gaps
                                                                                                                   66.7%; Score 733.6; DB 4; Length 878; 93.7%; Pred. No. 1.9e-173; ive 0; Mismatches 19; Indels 38
                                                                                                                                    Best Local Similarity 93.73
Matches 853; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         934 GGCTCTCCCA 943
                                                                                                                                                                                                                                                     66
                                                                                                                                                                                                                                                                                                                      159
                                                                                                                                                                                                                                                                                                                                                                                      219
                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                      279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         875
                                                                                                                     Query Match
                                                                                    ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                g
                                                                                                                                                                                                                                          ⋧
                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ∂
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
```

```
;
                                                                                                                             Tumor Gene Index
Unpublished (1997)
Contact: Robert Strausberg, Ph.D.
Contact: Robert Strausberg, Ph.D.
Tissue Procurement: Dr. Gary W. Hunninghake, U of I
Essue Procurement: Dr. Gary W. Hunninghake, U of I
cDNA Library preparation: Dr. M. Bento Soares, University of Iowa
DNA Sequencing by: Dr. M. Bento Soares, University of Iowa
DNA Sequencing by: Dr. M. Bento Soares, University of Iowa
Clone Distribution: Distribution information can be found at
http://genome.ulowa.edu/distribution/cgap.html
POLYA=Yes.
                                                     Eukaryotta, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. I toasea I to 743.
NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 743;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 60.9%; Score 669.8; DB 6; Best Local Similarity 94.1%; Pred. No. 2.1e-157; Matches 723; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
CB529999.1 GI:29391246
```

셤

ሯ

g

δ a ò 셤 ò

ठे

요 ò g ò 셤 ò 용

```
/lab_host="DH10B"
/clone lib="Soares testis NHT"
/note="Vector: pT7T3D-Pac (Pharmacia) with a modified
polylinker; Site 1: Not 1; Site 2: Eco RI; 1st strand cDNA
was prepared from mRNA obtained from Clontech
Liboratories, Inc., and primed with a Not I - oligo(dT)
                                                Sequencing Center
information can be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTGTCTT 1024
                                                                                                                                                                                                                                                                                                                                                                                    GACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCCCATC 574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGGTACATCAAAGAGGATGAGGCACTGCCATCTCNCCACACCCTCCAGGAAGTTCAGGTC 454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGTCGTG 784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAAGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCCATCATAACNAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAAGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GACTCAGGTGGACCCTTGGCCTGTAACAAGAATGGACTGTGGTATCAGATTGGAGTCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGCTGGGGAGTGGGCTGGGCCCCAATCGGCCCCGGTGTCTACACCCAATATCAGCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CACTITICAGICCACAGAAGCIGAIGGCCCAGAGIGGCAIGICCCAGGCCAGACCCCICC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 545 GGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCCTCCAGGAAGTTCAGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGCTGGGGAGTGTGGGTGTGGGCCCAATCGGCCCGGTGTCTACACCCAATATCAGCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTTCGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               rescentacterritricecreterressecreteceaeterssesee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 624.8; DB 1; Length 633;
Pred. No. 4.3e-146;
0; Mismatches 4; Indels 0
Ξ
cDNA Library Preparation: M. Bento Soares, Ph.D.,
                           CONTRACTOR Arrayed by: Greg Lennon, Ph.D.
DNA Sequencing by: Washington University Genome
Clone distribution: NCI-CGAP clone distribution
found through the I.M.A.G.E. Consortium/LLNL at:
www-bio.llnl.gov/bbrp/image/image.html
Insert Length: 912 Std Brror: 0.00
Seq primer: -40ml3 fwd. ET from Amersham
High quality sequence stop: 455.
                                                                                                                                                                                                  /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:1735929"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            tch 56.8%; al Similarity 99.4%; 626; Conservative (
                                                                                                                                                                                                                                                                        /sex="male"
                                                                                                                                                                                    j. .633
                 Bonaldo, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local S:
Matches 626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               153
                                                                                                                                                                                     source
                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      යි
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         윰
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    All26185 633 bp mRNA linear EST 28-OCT-1998 qd81h05.x1 Soares testis NHT Homo sapiens cDNA clone IMAGE:1735929 3' similar to SW.PSS8_HUMAN Q16651 PROSTASIN PRECURSOR ;, mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTCCTGGGGCCGGTCTGAGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAG 1003
                                                                                                                                                                                                  523
                                                                                                                                                                                                                                                                      583
                                                                                                                                                                                                                                                                                                                                        643
                                                                                                                                                                                                                                                                                                                                                                                                                                          348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 943
                               684
                                                                403
                                                                                                624
                                                                                                                                 463
                                                                                                                                                                  564
                                                                                                                                                                                                                                     504
                                                                                                                                                                                                                                                                                                       444
                                                                                                                                                                                                                                                                                                                                                                        384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 185 ATGTCCCAGCCAGACCCCTCCTGGCCGCTACTCTTTTCCCTCTTCTCTGGGCTCTCCCA
                                                                                                                                                                                                                                                                                                                                                                                                       AAGTACAGTTTCCGCAAGGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGC 703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mamalia, Eutheria, Primates, Catarrhini, Hominidae, Homo., 1 (Dases 1 to 633)

NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
NATional Cancer Institute, Cancer Genome Anatomy Project (CGAP), Unpublished (1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTCCTGGGGCCGGTCTGAGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAG 66
                                                                                                                                                                                                                       ACTAAACACATCCAGCCCATCTGTCTCTCCAGGCCTCCACATTTGAGTTTGAGTACCGGACA
                                                                                                                                                                                                                                                                                                                                                                                                                            Greracaccaararcagecaccacriricagregarceagargergargeceagagrege
               CTTAGTGATCCCTCCGGGTGGATGGTCCAGTNTGGCCAGCTGACTTCCATGCCATCCTTC
                                                                                  464 ACTAAACACATCCAGCCCATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACA
                                                                                                                                                                                                                                                                                           GACTGCTGGGTGACTGGCTGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCAC
                                                                                                                                                                                                                                                                                                                                       ACCCTCCAGGAAGTTCAGGTCGCCATCATAACAACTCTATGTGCAACCACCTCTTCCTC
                                                                                                                                                                                                                                                                                                                                                                   ACCCTCCAGGAAGTTCAGGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     305 TGGTATCAGATTGGAGTCGTGAGGTGGGGAGTGGCTGTGGTCGGCCCAATCGGCCCGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGTCCCAGCCAGACCCCTCCTGGCCGCTACTCTTTTCCCTCTTTCTGGGCTCTCCCA
 CTTAGTGATCCCTCCGGGTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCGTTC
                                                                TACCTGGGGAATTCACCCCTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTAC
                                                                                                                                                                                                                                                                      GACTGCTGGTGACTGGCTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            704 GGGAAGGATGCCTGCTTCGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ------dergacreaegecerciesecreaege
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGGTATCAGATTGGAGTCGTGAGCTGGGAGTGGGCTGTGGTCGGCCCAATCGGCCCGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTCTACACCAATATCAGCCACCACTTTGAGTGGATCCAGAAGCTGATGGCCCAGAGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AII26185
AI126185.1 GI:3594699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sednence.
                                                                                                                                                                                                                                                                                                                                                                                                         644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              245
                               743
                                                                                                                                                                                                                                                                                                                                        584
                                                                                                                                                                                                                                                                                                                                                                                                                                          383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    944
                                                                344
                                                                                                683
                                                                                                                                                                                                                                                                                                                                                                        443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 824
                                                                                                                                   404
                                                                                                                                                                  523
                                                                                                                                                                                                                                     563
                                                                                                                                                                                                                                                                      524
                                                                                                                                                                                                                                                                                                     503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AI126185/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMMENT
```

ò 셤 ò 셤 à 셤 ઠે 셤

ઠે 셤

ö

484

셤

ò

```
BM017444 682 bp. mRNA linear EST 30-OCT-2001
60364544F1 NIH_MGC_98 Homo sapiens CDNA clone IMACE:5426338 5',
mRNA sequence.
BM017444
           239
                                                                                                                                                                  386
                                                                                                                                                                                                                                                                         446
                                                                                                                                                                                                                                                                                                                             419
                                                                                                                                                                                                                                                                                                                                                                                  506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /tissue_type="astrocytoma grade IV, cell line"
/lab host="DH10B (phage-resistant)"
/lolome lib="NIH MGC_98"
/note="Organ: brain; Vector: pOTB7; Site 1: XhoI; Site_2:
ECORI; cDNA made by oligo-dT priming. Directionally
                                                                                                                                                                                                                    300 criccardccarccricrigadccriccaddcracracraccriccrircgraricgaara 359
                                                                                                                                                                                                                                                                                                                                                                                                                                      479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240 TIGAAACCIATAGIGACCITAGIGAICCCICCGGGIGGAIGGICCAGITIGGCCAGCIGA
                                                                                                                                                                                                                                                                                                       360 TCTATCTGAGCCCTCGCTACCTGGGGAATTCACCCTATGACATTGCCTTGGTGAAGCTGT
                                                                                                                                                                                                                                                                                                                                                                                                             CTGCACCTGTCACCTACACACATCCAGCCCATCTGTCTCTCAGGCCTCCACATTTG
        180 CCCACGTATGCGGAGTGAGCCTGCTCAGCCACCGCTGGGCACTCACGGCGGCGCACTGCT
                                                                                                                                                                                                                                                                                                                                                                                  CTGCACCTGTCACCTACACTAAACACATCCAGCCCATCTGTCTCCAGGCCTCCACATTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        507 AGTTTGAGAACCGGACAGACTGCTGGGTGACTGGCTGGGGGTACATCAAAGAGGATGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      480 AGITITGAGAACCGGACAGACTGCTGGGTGACTGGCTGGGGGGTACATCAAAGAGGATGAG-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       627 GCAACCACCTCTTCCTCAAGTACAGTTTCCGCAAGGACATCTTTGGAGACATGGTTTGTG
                                                                                                                                                                327 CTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTACTACACCCGTTACTTCGTATCGAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 567 CACTGCCATCTCCCCACACCCTCCAGGAAGTTCAGGTCGCCATCATAAACAACTCTATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               687 CTGGCAA--TGCCCAAGGCGGGAAGGATGCCTGCTTCG 722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  634 crescaharsccccahasccahascarscriscriscs 671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .682
/organism="Homo sapiens"
/mol_type="mRNA"
/db xref="taxon:9606"
/clone="IMAGE:5426338"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BM017444.1 GI:16531798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
                                                                                                                                                                                                                                                                         387
                                                                                                                                                                                                                                                                                                                                                                                  447
                                                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 13
BM017444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                           a
                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                            ò
                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /MOJ_type="mRNA" | Moj_type="mRNA" | Moj_type="mRNA" | Moj_type="mRNA" | Moj_type="mRNA" | Moj_tref="taxon:9606" | Alone="INAGE:5426819" | Alone="INAGE:5426819" | Alone="INAGE:5426819" | Alone="Inage" | Alo
                                                                                                                                                                                                                                  705 bp mRNA linear EST 30-OCT-2001 mRNA sequence.
BM019026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCCACGTATGCGGAGTGAGCCTGCTCAGCCACGCTGGGCACTCACGGCGGCGCACTGCT 266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Email: cgapbs remail.nih.gov
Tissue Procurement: ATCC
cDNA Library Preparation: Ling Hong/Rubin Laboratory
cDNA Library Arrayed by: The I.M.A.G.B. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.B. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLCM1896 row: c column: 04
High quality sequence start: 7
High quality sequence stop: 675.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61 A-GAGGCGCCCCTTATCAGGACCATGCGGCCGACGGGTCATCAGGTCGCGCATCGTGG 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         147 GTGGAGAGGACGCCGAACTCGGGCGTTGGCCGTGGCAGGGGAGCCTGCGCCTGTGGGATT 206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9
TACCTGAGCCCATGCAGCCTGGGCCACTGCCAGTCAGGCCCTGGTTCTCTTCTGTCTT 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
1 (bases 1 to 705)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCTGGGCGCTGCTGCTGCTGCTGCTGGCTCGGGCT - GACTCAGGAGGCCGGAGTCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  87 AGGAGGCGGCGCCGTTATCAGGACCATGCGGCCGACGGGTCATCACGTCGCGCATCGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC) Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 705;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 51.7%; Score 569.2; DB 4; Best Local Similarity 93.1%; Pred. No. 4.3e-132; Matches 650; Conservative 0; Mismatches 18;
                                                                                  1025 GITIGGIAATAAACACATICCAGIIGAIGC 1054
                                                                                                                 GTTTGGTAATAAACACATTCCAGTTGATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. .705
/organism≃"Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                            BM019026.1 GI:16533380
                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                          ESI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                 RESULT 12
BM019026
                                                                                                                                                                                                                                                                                                                                                   ACCESSION
                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
```

ORIGIN

셤 ð g à

ò 원 8 þ

```
Mar
Sun
```

ઠે ద ò g ò g ò a ò 셤 ð 셤 Š 요 δ g ઠે 셤

```
/Lisue_tripe="medila"
/lab_host="medila"
/lab_host="medila"
/clone_lib="NIH MGC_l19"
/clone_lib="NIH MGC_l19"
/note="Organ: brain; Vector: pcMV-SPORT6; Site 1: NotI;
/note="Organ: brain; Vector: pcMV-SPORT6; Site 1: NotI;
/note="Organ: brain; Vector site 1: NotI;
/note=tonally cloned (Ecctor site 1: Note: site 1: Note: this is a NIH_MGC_Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGGGCGTTGGCCGTGGGGGGCCTGCGCCTGTGGGGATTCCCACGTATGCGGAGTGAG 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                radrearcccrccedredarderccadrrredccadcrdacrrccarccarccrrcrd 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTACA-GITICCGCAAGGACAIC-TITGGAGACAIGGITIGIGCTGGCAAIGCCCAAGGC 703
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gow. o column: 23
http://image.llnl.gow. o column: 23
High quality sequence stop: 553.
High quality sequence stop: 553.

// organism="Homo sapiens"
// organism="Homo sapiens"
// organism="Homo sapiens"
// organism="Romo sapiens"
// colone="IMAGE:274958"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGCCTGCAGGCCTACTACACCCCGTTACTTCGTATCGAATATCTGTGGGCCTCGCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCTGGGGAATTCACCCTATGACATTGCCTTGGTGAAGCTGTCTGCACCCTGTCACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTACAGGTTCCCGCAAGGACATCTTTTGGAGACTTGGTTTTGTGCTGGCAGATGCCCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCTCCAGGAAGTTCAGGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TAGTGATCCCTCCGGGTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCTGGGGAATTCACCCTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TAAACACATCCAGCCCATCTGCTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TARACACATCCAGCCCATCTGTCTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGCTGGGTGACTGGCGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGCTGGGTGACTGGGGGGTACATGAAGAGGATGAGGCACTGCCATCTCCCCACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCTCCAGGGAATTCAGGGCGCCATCATAGACAACTCTATGGGCAACCACCTCTTCCTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGGAAGGATGCCTGCTTCGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGG 759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    49.9%; Score 548.8; DB 4; Length 1219;
91.8%; Pred. No. 6.5e-127;
ive 0; Mismatches 52; Indels 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity 91.8 Matches 602, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8 6 8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       සු
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGENCOURT 6558382 NIH_MGC_119 bp mRNA linear EST 204FBB-2002
5', mRNA Sequence.
                                                                                                                                                                                                                                                                                                                                               230
                                                                                                                                                                                                                                   165
                                                                                                                                                                                                                                                       111 AGGACCATGCGGCCCGACGGGTCATCACGTCGCGCATCCTGGGGTGGAGGACGACGCCGAACT 170
                                                                                                                                                                                                                                                                                                            224
                                                                                                                                                                                                                                                                                                                                                                                     284
                                                                                                                                                                                                                                                                                                                                                                                                                          290
                                                                                                                                                                                                                                                                                                                                                                                                                                                               344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTAAACACATCCAGCCCATCTGTCTCCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAG 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCCTCCAGGAGTTCAGGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCA 644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCCTCCAGGAAGTTCAGGTCGCCATCATACACACTCTATGTGCAACCACCTCTTCCTCA 650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.

I (bases 1 to 1219)

NIH-MGC http://mgc.ncl.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Life Technologies, Inc.

CDNA Library Preparation: Life Technologies, Inc.
                           Hong
 cloned into EcoRI/XhoI sites using the following §' adaptor: GGCACGAG(G). Library constructed by Ling Hoi in the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-CDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies). Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                CGGCCGTTGCCCTGTGCGCGCGGGGCCTGTGGGGTTCCCACGTATGCGGAGTGA
                                                                                                                                                                                                                                                                                                                                                                                                          GCCTGCTCAGCCACCGCTGGGCACTCACGGCGGCGCACTGCTTTGAAACCTATAGTGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCTGGGGAATTCACCCTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCTGGGGAATTCACCCTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTAAACACATCCAGCCCATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACTIGCTIGGGTGACTIGGGGGGTACATCAAAGAGGATGAGGCACTGCCATTCTCCCCACA
                                                                                                                                                                                                                                   CGGGCGTTGGCC-GTGGCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGA
                                                                                                                                                                                                                                                                                                                                                                                     225 GCCTGCTCAGCCACCGCTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTAGTGATCCCTCCGGGTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTAGTGATCCCTCCGGGTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                              1;
                                                                                                                                                         Length
                                                                                                                                                                                              6; Indels
                                                                                                                                                       50.0%; Score 550.4; DB 4; 98.8%; Pred. No. 2.3e-127; ive 0; Mismatches 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGTACAGTTTCCGCAAGGACATCTTTGGAGAC 676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BMS53333.1 GI:18791973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (human)
                                                                                                                                                                          Best Local Similarity 98.8
Matches 565; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BM553333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EST.
                                                                                                                                                                                                                                                                                                            166
                                                                                                                                                                                                                                                                                                                                                                                                                          231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              651
                                                                                                                                                             Match
                                                                                                                                                           Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 14
BM553333
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
```

셤 ઠે

345

405 365 465

285

.; 7

245

425

525

485

585 545 645

us-10-040-647-5.rst

셤

```
905 TGGCCGCTACTCTTTTCCCTCTTCTCTGGGCTCTCCCACTCCTGGGGCCGGTCTGAGCC 964
      410 TCTTTGGAGACATGGTTTGTGCTGGCAAATGCCCAAGGCGGGAAGGATGCCTGCTTCGGT 351
                                                                                                                                                290 AGCTGGGGAGTGGGCTGTGGNTCGCCCAATCGGCCCGGTGTCTACACCAATATCAGCCAC
                                                                                  350 GACTCAGGTGGACCCTTGGCCTGTAACAAGAATGGACTGTGGTATCAGATTGGAGTCGTG
                                                                                                                                                                                                       CACTITIGAGIGGAICCAGAAGCIGAIGGCCCAGAGIGGCAIGICCCAGGCCAGACCCCTCC
                                                                                                                                                                                                                                                                                                                                                                  TACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTTCTGTCTT
                                                                                                                                                                                                                                                                                                                                                                                         110 TACCTGAGCCCATGCAGNCT-GGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTGTCTT
                                                                                                                       AGCTGGGGAGTGGGCTGTGGTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAGCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                              1025 GITTGGTAATAAACACATTCCAGTTGATGCCTTGCAGGCCATTTTTCAAAA 1076
                                                                                                                                                                                                                                                                                                                                                                                                                                                               5, 2005, 09:07:32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Search completed: March
Job time: 4257.77 secs
                                                                                                                                                                                                     845
                                                                                                                                                                                                                                                                                                                                                                  965
                                             725
                                                                                                                         785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 51
                                                                        g
                                                                                                                                                    g
                                                                                                                                                                                                     à
                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                à
                                             ò
                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                AA161187 591 bp mRNA linear EST 16-DEC-1996 2059b06.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone IMAGE:591155 3' similar to TR:E218488 E218488 TRYPTASE ;, mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   411
                                                                                                                                                                                                                                                                              Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia; Eutheria, Primates, Catarrhini, Hominidae, Homo.

1 (bases 1 to 591)

Hillier,L., Lennon,G., Becker,M., Bonaldo,M.F., Chiapelli,B., Chissoe,S., Dietrich,N., DuBuque,T., Favello,A., Gish,W., Hawkins,M., Hulman,M., Kucaba,T., Lacy,M., Le,M., Le,N., Mardis,E., Moore,B., Morris,M., Parsons,J., Prange,C., Rikin,L., Rohlfing,T., Schallenberg,K., Soares,M.B., Tan,F., Thierry-Meg,J., Trevaskis,E., Underwood,K., Wohldmann,P., Waterston,R., Wilson,R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Generation and analysis of 280,000 human expressed sequence tags Genome Res. 6 (9), 807-828 (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1800
Fax: 314 286 1800
Email: estewatson.wustl.edu
This clone is available royalty-free through LLNL , contact the IMAGE Consortium (info@image.llnl.gov) for further information. Seq primer: -40M13 fwd. from Amersham High quality sequence stop: 386.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        547 GTACATCAAAGAGGATGAGGCACTGCCATCTCCCC-ACACCCTCCAGGAAGTTCAGGTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTACATCAANGAGGATGAGGCACTGCCATCTCCCCAACCTTCCAGGAAGTTCAGNTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCATCATAAACCACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAAGGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCTTTGGAGACATGGTTTGTGCTGGC-AATGCCCAAGGGGGGAAGGATGCCTGCTTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAAGGACA
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
47.8%; Score 525.8; DB 1; Length 591;
Best Local Similarity 97.0%; Pred. No. 3.5e-121;
Matches 574; Conservative 0; Mismatches 14; Indels 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
/mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /db_xref="GDB:4622541"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /db_xref="taxon:9606"
/clone="IMAGE:591155"
                                                                                                                                                                                                     AA161187.1 GI:1735441
                                                                                                                       zo59b06.sl Stratagene
                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact: Wilson RK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /mol
                                                                                                                                                                                                                                                                                                                                                                                                                                                               and Marra, M.
                                                                                                                                                                  seguence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97044478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8889549
                                                                                                                                                                                                                                                                 Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        999
                                                                                  AA161187/c
                                                                                                     LOCUS
                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                             ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
JOURNAL
MEDLINE
PUBMED
COMMENT
                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                             RESULT 15
                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORIGIN
```

Q

8 요 ò ద ò

ઠે

us-10-040-647-5.rnpb

```
US-10-040-647-5
                                                                                       1090.6
1090.6
1090.6
1090.6
1090.6
                                                                                                                                                                                                                                                                                                                                                1090.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1090.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1090.
                                                                                                                                                                                                                                                                                                                                                                                                                1090.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 5, Appli
Sequence 256, App
                                                                                                                                  2005, 04:37:53; Search time 722.188 Seconds (without alignments) 9038.138 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                 Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Published Applications NA:*

| cgn2_6/ptodata/2/pubpna/USO7_PUBCOMB.seq:*
2: /cgn2_6/ptodata/2/pubpna/PCT NEW PUB.seq:*
3: /cgn2_6/ptodata/2/pubpna/USO6_NEW PUB.seq:*
4: /cgn2_6/ptodata/2/pubpna/USO6_PUBCOMB.seq:*
5: /cgn2_6/ptodata/2/pubpna/USO6_PUBCOMB.seq:*
6: /cgn2_6/ptodata/2/pubpna/USO7_NEW PUB.seq:*
7: /cgn2_6/ptodata/2/pubpna/USO8_NEW PUB.seq:*
8: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
9: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
11: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
12: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
12: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
12: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
13: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
14: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
15: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
16: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
16: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
17: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
18: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
19: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
10: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
11: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
12: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
13: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
14: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
15: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
16: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
17: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
18: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
18: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
19: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
10: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
11: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
12: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
13: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
14: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-040-647-5
US-09-909-320-256
US-09-909-008-256
US-09-905-291A-256
US-09-902-833-256
US-09-907-841-256
US-09-907-841-256
US-09-907-841-256
US-09-907-841-256
US-09-907-841-256
US-09-907-841-256
US-09-908-093-256
US-09-908-093-256
                                                                                                                                                                                                                                                                                                                                                                                                                                   Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                        5401638 segs, 2966923429 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                       nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                   IDENTITY NUC Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB seq length: 0
DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                            US-10-040-647-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query
Match Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11100
111000
111000
111000
                                                                                                                                    ,
                                                                                                                                      March
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1090.6
1090.6
1090.6
1090.6
1090.6
1090.6
                                                                                                                                                                                                                                                                                                                      Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score
                                                                                         1
                                                                                         OM nucleic
                                                                                                                                                                                                                                                                         Sequence:
                                                                                                                                                                                                                                                                                                                                                                                        Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Minimum I
Maximum I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Database
                                                                                                                                    Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Result
No.
```

```
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                  Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Seq
                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence Sequence S
  Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                  Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
US-09-906-838-256
US-09-907-613-256
US-09-907-942-256
US-09-904-820-256
US-09-904-820-256
US-09-904-820-256
US-09-906-700-256
US-09-906-700-256
US-09-906-700-256
US-09-906-700-256
US-09-907-749A-256
US-09-907-748-256
US-09-907-748-256
US-09-907-756-256
US-09-907-925-256
                                                                                                                                                                                                                                                                                                                                 US-09-904-485-256
US-09-905-348-256
                                                                                                                                                                                                                                                                                                                                                            US-09-905-088-256
                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-902-713-256
US-09-907-979-256
                                                                                                                                                                                                                                                                                                         US-09-904-553-256
                                                                                                                                                                                                                                                                                                                                                                                                    US-09-902-759-256
                                                                                                                                                                                                                                                                                                                                                                                                                US-09-902-63
```

ALIGNMENTS

```
USSULT INCORPATION:

Sequence 5, Application US/10040647

Publication No. US2030302154A1

GENERAL INFORMATION:

APPLICANT: (US only) ANTALIS Toni Marie and HOOPER John David

TITES OF INVENTION: NOVEL MOLECULES

NUMBER OF SEQUENCES: 30

CORRESPONDENCE ADDRESS: 30

CORRESPONDENCE ADDRESS: 30

CORRESPONDENCE ADDRESS: 30

CONTRY: USA

ZIP: 11530

COMPUTE: 180 YORK

COUNTRY: USA

ZIP: 11530

COMPUTE: 180 PC Compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Batentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/10/040,647

FILING DATE: 07-Jan-2002

CLASSIFICATION NUMBER: 09/023,942

FILING DATE: 13-FEB-1997

APPLICATION NUMBER: POSIO1/97

FILING DATE: 13-FEB-1997

APPLICATION NUMBER: POSIO1/97

FILING DATE: 13-FEB-1997

APPLICATION NUMBER: International PCT Application

FILING DATE: 13-FEB-1997

ATTORNEY/AGENT INFORMATION:
```

900 900 960

```
AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1020
                                                                                                                                                                                                                                                                                                                                                                                                                            781 CGTGAGCTGGGGGAGTGGGCTGTGGTCGGCCCAATCGGCCCGGTGTCTACACCACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                  crecineacederacrerringecretricantesesererecaerereseseceserere
                                                                                                                                                                                                                                                                                                                                  AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG
                                                                                                                                            CICCIGGCCGCTACICITITICCCTCTTCTCTGGGCTCTCCCCACTCCTGGGGCCCGGTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               and Transmembrane Polypeptides and Nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: Secreted and Transmembra:
TITLE OF INVENTION: Acids Encoding the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: PCT/USO/04414
PRIOR FILING DATE: 2000-02-22
PRIOR PELING DATE: 1999-07-07
PRIOR PILING DATE: 1999-07-07
PRIOR APPLICATION NUMBER: US 60/145,698
PRIOR APPLICATION NUMBER: US 60/146,222
PRIOR PELING DATE: 1999-07-26
PRIOR PELING DATE: 1999-07-28
PRIOR PELING DATE: 1999-07-28
PRIOR FILING DATE: 1999-07-28
PRIOR APPLICATION NUMBER: PCT/US99/20594
PRIOR FILING DATE: 1999-09-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/09/909,320
CURRENT FILING DATE: 2002-01-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 256, Application US/09909320
Patent No. US20020132240A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1081 AAAAAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAAAAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Godowski, Paul J.
Grimaldi, Christopher J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Paoni, Nicholas F.
Roy, Margaret Ann
Stewart, Timothy A.
Tumas, Daniel
Williams, P. Mickey
Wood, William, I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Fong, Sherman
Gao, Wei-Qiang
Gerber, Hanspeter
Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ferrara, Napoleone
Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gurney, Austin L.
Hillan, Kenneth, J
Kljavin, Ivar J.
Mather, Jennie P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Genentech, Inc.
APPLICANT: Ashkenzi, Avi
APPLICANT: Betstein, David
APPLICANT: Beton, Dan L.
APPLICANT: Eaton, Dan L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILE REFERENCE: 10466-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Goddard, A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pan, James
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JS-09-909-320-256
                                                                                                                                                                                                                           901
                                                                                                                                                                                                                                                                 106
                                                                                                                                                                                                                                                                                                       961
                                                                                                                                                                                                                                                                                                                                               961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1081
                                                                                                                                                                                                                                                                                                                                                                                      1021
                                                              781
                                                                                                                                              841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT
                                                                                                  셤
                                                                                                                                                                             g
                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                        엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                            8
                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGGAATTCACC 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361 cracaccerractregrarceaararcrarcreaecerreecreeceaarreaec 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCTTATCAGGACCATGCGGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121 ACGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCGAACTCGGGCGTTGGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCAGGGGACCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTGCTCCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCCACCCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cacadadadadacanadacacacacadadadacanachachachachachachachachacha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGCTGGACTCAGGAGCCGGAGTCGCAGGAGGCGGCCGTTATCAGGACCATGCGGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121 ACGGGTCATCACGTCGCGCATCGTGGGGGGAGGACGCCGAACTCGGGCGTTGGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241 CTGGGCACTCACGGCGGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGTCGCCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         661 GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                                                                                                                                                           DB 14; Length 1100;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 100.0%; Score 1100; Best Local Similarity 100.0%; Pred. No. 0; Matches 1100; Conservative 0; Mismatches
                  REGISTRATION NUMBER: 31,346
REFERENCE/DOCKET NUMBER: 11168
TELECOMMUNICATION INFORMATION:
TELEPHONE: (516) 742 4343
TELEPX: (516) 742 4366
TELEX: 230 901 SANS UR
                                                                                                                                                                                                                                                                                                                     LOCATION: 17.961
; SEQUENCE DESCRIPTION: SEQ ID NO: 5:
US-10-040-647-5
                                                                                                                                      INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 1100 base pairs
TYPE: nucletc acid
STRANDENESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA
    FRANK S
    NAME: DIGIGLIO,
                                                                                                                                                                                                                                                                                                       NAME/KEY: CDS
LOCATION: 17.
                                                                                                                                                                                                                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               721
```

ద

ð 셤

à 셤 ò ò 셤 ò ద à 셤 셤

ò

셤

ò

셤

à 셤 ò

à

a ₽ g ò

```
TCTTGTTTGGTAATAAACACATTCCAGTTGATGCCTTGCAGGGCATTTTTCAAAAAAA 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  964 AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             720
                                                                                                                                                                                   723
                                                                                                                                                                                                                                780
                                                                                                                                                                                                                                                                              783
                                                                                                                                                                                                                                                                                                                           840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               960
                                                                                             663
                                                                                                                                                                                                                                                                                                                                                                      843
                                                                                                                                                                                                                                                                                                                                                                                                                                                               904 CTCCTGGCCACTACTCTTTTTCCCTCTTCTTTGGGCTCTCCCCACTCCTGGGGCCCGGTCTG 963
  544 CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCCTCCAGGAAGTTCA 603
                                                                       GGTCGCCATCATAAACAACTCTATGTGCAACCCCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                  GGACATCTTTGGAGACATGGTTTGTGCTGGCAACGCCCAAGGCGGGAAGGATGCCTG
                                                                                                                                                                                                                                                                                                                           CGTGAGCTGGGGGAGTGGGCTGTGGCCCCAATCGGCCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                      cercaccederecercificatececearceseces
                                                                                                                                          GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                             CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGAATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: 10466-14
CURRENT APPLICATION NUMBER: US/09/909,088B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 256, Application US/0990908BB Patent No. US20020146709A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Perrara, Napoleone
Filvaroff, Bllen
Fong, Sherman
Gao, Wel-Qiang
Gerber, Hanspeter
Gerritsen, Mary B.
Goddwaki, Paul J.
Goddwaki, Paul J.
Grimaldi, Christopher J.
Kliavin, Kenneth, J.
Kljavin, Ivar J.
Mather, Jennie P.
Pan, James
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1084 AAAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1081 AAAAAAAAAAAAA 1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Roy, Margaret Ann
Stewart, Timothy A.
Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ashkenazi, Avi
Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Desnoyers, Luc
Eaton, Dan L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Patent No. US2002014
GENERAL INFORMATION
APPLICANT: Genented
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 3
US-09-909-088B-256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1024
                                               601
                                                                                             604
                                                                                                                                      661
                                                                                                                                                                                   664
                                                                                                                                                                                                                                721
                                                                                                                                                                                                                                                                            724
                                                                                                                                                                                                                                                                                                                         781
                                                                                                                                                                                                                                                                                                                                                                      784
                                                                                                                                                                                                                                                                                                                                                                                                                    841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                          જે
                                                                                                                                                                         g
                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                               名
                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         名
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121 ACGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCGAACTCGGGCGTTGGCCGTG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    184 GCAGGGGACCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTGCTCAGCCACCC 243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        304 GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA 363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC 423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC 483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACACCCTCCAGGAAGTTCA 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGCGCGCTTATCAGGACCATGCGGCCG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    64 GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCG 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               124 ACGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCGAACTCGGGCGTTGGCGTG 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTTAGTGATCCCTCCGG 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGGAATTCACC 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301 GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cecesasasasaseccanosecececececececerecnecrececerecres
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 9; Length 1100;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 1090.6;
Pred. No. 0;
0; Mismatches
           FRIOR AFFLICATION NUMBER: PCI/0399/20144

PRIOR PLING DATE: 1999-09-13

PRIOR PLING DATE: 1999-09-13

PRIOR PLING DATE: 1999-09-15

PRIOR PLING DATE: 1999-09-16

PRIOR PLING DATE: 1999-09-16

PRIOR PLING DATE: 1999-09-16

PRIOR PLING DATE: 1999-10-05

PRIOR PLING DATE: 1999-10-05

PRIOR PLING DATE: 1999-11-29

PRIOR PLING DATE: 1999-11-29

PRIOR PLING DATE: 1999-11-20

PRIOR PLING DATE: 1999-11-20

PRIOR PLING DATE: 1999-12-02

PRIOR PLING DATE: 1999-12-02

PRIOR PLING DATE: 1999-12-06

PRIOR PLING DATE: 1999-12-26

PRIOR PLING DATE: 1999-12-26
APPLICATION NUMBER: PCT/US99/20944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 99.6%;
Matches 1093; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; TYPE: DNA
; ORGANISM: Homo Sapien
US-09-909-320-256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       541
```

g

ઠે

셤 Š 셤

ð

요

8

셤

Š

셤 ò 셤 δ

ò

셤

δ

900

780 783 840

us-10-040-647-5.rnpb

```
961 AGCCTACCTGAGCCCATGCCAGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         964 AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1024 TCTIGTTTGGTAATAAACACATTCCAGTTGATGCCTTGCAGGGCATTCTTCAAAAAAA 1083
                                                                                                                                                                                                                                                                                                                                                                                                                    CTGGGGGTACATCAAAGAGGGATGAGGCACTGCCATCTCCCCACACCCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                      604 GGTGGCCATCATAAACAACTCTATGTGCAACTCCTCTTCTCTCAGTACAGTTTCGCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       844 CCACCACTTIGAGTGGATCCAGAAGCTGATGGCCCCAGAGTGGCCATGTCCCAGAGCCAGACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                904 CTCCTGGCCACTACTCTTTTTCCCTCTTCTCTGGGCTCTCCCACTCCTGGGGCCGGTCTG
                                                                424 CTATGACATTGCCTTGGTGAAGCTGTGTCTGCACCTGTCACCTACACTAAAACACATCCAGCC
                                                                                                                                                            CATCIGITATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             724 CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGAATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CGTGAGCTGGGGGTGTGGTCGGCCCAATCGGCCCGGTGTCTACACAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGTGAGCTGGGGGTGGGCTGGGCTCGCCCAATCGGCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                           crososoracarcaasasasasasasascascroscarcroscasascrosasasarasa
                                                                                                                                                                                                                                                                                                                          GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 256, Application US/09905291A Patent No. US20020160374A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Godowski, Paul J.
Grimaldi, Christopher J.
Gurney, Austin L.
Hillan, Kenneth, J.
Kljavin, Ivar J.
Mather, Jennie P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1081 AAAAAAAAAAAAA 1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1084 AAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Geneticch, Inc.
APPLICANT: Ashkenazi, Avi
APPLICANT: Betsein, David
APPLICANT: Betsein, David
APPLICANT: Eaton, Dan L.
APPLICANT: Ferrara, Napoleone
APPLICANT: Ferrara, Napoleone
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Olang
APPLICANT: Gerber, Hanspeter
APPLICANT: Gerber, Hanspeter
APPLICANT: Gerber, Hanspeter
APPLICANT: Geddard, A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JS-09-905-291A-256
                                                                                                                                                                                                                                                                              544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                             484
                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             784
                                     121
                                                                                                                              481
                                                                                                                                                                                                                                                                                                                          601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT
                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              64 GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCG 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121 ACGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCCGAACTCGGGCGTTGGCCGTG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GIGGAIGGICCAGTITGGCCAGCTGACTICCAIGCCAICCTICTGGAGCCTGCAGGCCTA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTACACCCGTTACTTCGTATCGAATATCTTGTAGCCCTCGCTACCTGGGGAATTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241 CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCTCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 CGCGGGAGAGGAGGCCATGGGCGCGCGCGCGCGCTGCTGCTGCTGCTGCTGCTGCTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 9; Length 1100;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99.1%; Score 1090.6;
llarity 99.6%; Pred. No. 0;
Conservative 0; Mismatches
CURRENT FILING DATE: 2001-07-18
PRIOR APPLICATION NUMBER: PCT/US00/04414
PRIOR FILING DATE: 2000-02-22
PRIOR FILING DATE: 1990-07-07
PRIOR FILING DATE: 1990-07-07
PRIOR FILING DATE: 1990-07-26
PRIOR APPLICATION NUMBER: US 60/145,698
PRIOR APPLICATION NUMBER: US 60/146,222
PRIOR PILING DATE: 1999-07-28
PRIOR PILING DATE: 1999-07-28
PRIOR PLILING DATE: 1999-09-13
PRIOR PILING DATE: 1999-09-13
PRIOR PILING DATE: 1999-09-13
PRIOR PILING DATE: 1999-09-13
PRIOR PILING DATE: 1999-09-15
PRIOR PILING DATE: 1999-09-15
PRIOR PILING DATE: 1999-10-05
PRIOR PILING DATE: 1999-11-20
PRIOR PILING DATE: 1999-12-02
PRIOR PILING DATE: 1999-12-03
PRIOR PILING DATE: 2000-01-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; TYPE: DNA
; ORGANISM: Homo Sapien
US-09-909-088B-256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 1093; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      364
```

요

유 ò 원

ò

g

8

g

ò

g à

us-10-040-647-5.rnpb

Sun

```
AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1023
                                                                       360
                                                                                                                                             420
                                                                                                                                                                               423
                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                       483
                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                               600
                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          963
                                                                                                         GTGGATGGTCCAGTTTGGCCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA 363
                                                                                                                                                                                                                                                                                                                             543
                                                                                                                                                                                                                                                                                                                                                                                                   603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 723
 300
                                   303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG
                                                                                                                                         AGCCTACCTGGGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG
                                                                     GIGGAIGGICCAGTIIGGCCAGCIGACTICCAIGCCAICCTICIGGAGCCIGCAGGCCTA
                                                                                                                                                                                                                                    CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                    CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                   GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGTGAGCTGGGGAGTGGGCTGTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                244 CTGGGCACTCACGGCGGCGCCACTTTGAAACCTATAGTGACCTTAGTGATCCTTCCGG
                                                                                                                                                                                                                   CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                         CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                            CATCTCTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGAGCTGG
                                                                                                                                                                                                                                                                                                                                                               CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCCCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; Sequence 256, Application US/09902853
; Publication No. US2002019265941
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Botstein, David
; APPLICANT: Bestein, David
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1081 AAAAAAAAAAAAA 1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 5
US-09-902-853-256
                                                                                                                                                                                                                                                                                                                                                                                                   544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1084
                                                                                                                                                                               364
                                                                                                                                                                                                                                                                                                                             484
                                                                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  964
 241
                                                                       301
                                                                                                       304
                                                                                                                                           361
                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                     424
                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        901
                                                                     ò
                                                                                            g
                                                                                                                                    ઠે
                                                                                                                                                                    g
                                                                                                                                                                                                        જે
                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                       ર્જ
                                                                                                                                                                                                                                                                                                              ద
                                                                                                                                                                                                                                                                                                                                                    ठ
                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                    APPLICANT: Roy, Magaret Ann
APPLICANT: Roy, Magaret Ann
APPLICANT: Roy, Magaret Ann
APPLICANT: Stewart, Timochy A.
APPLICANT: Thuma, P. Mickey
APPLICANT: Thuma, P. Mickey
APPLICANT: Thuma, P. Mickey
APPLICANT: Wood, William, P. Mickey
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
CURRENT PELING A. Acids Encoding the Same
FILE OF INVENTION: NUMBER: US/09/905,291A
CURRENT PELING DATE: 2001-07-12-2014
CURRENT PELING DATE: 1096-0-14
PRIOR PILING DATE: 1099-0-09
PRIOR PELING DATE: 1099-0-09
PRIOR PELING DATE: 1099-0-09
PRIOR PELING DATE: 1099-0-09
PRIOR PELING DATE: 1099-0-10-05
PRIOR PELING DATE: 1099-0-11-09
PRIOR PELING DATE: 1099-0-11-09
PRIOR PELING DATE: 1099-0-11-09
PRIOR PELING DATE: 1099-11-09
PRIOR PELING DATE: 1099-12-02
PRIOR PELING DATE: 1099-12-02
PRIOR PELING DATE: 1099-12-03
PRIOR PELING DATE: 1099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   64 GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCTTATCAGGACCATGCGGCCG 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121 ACGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCGAACTCGGGCGTTGGCCGTG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG 243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4 cécédéadadechécicariódeciócicececécicariócricariócricariócricariócrica 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCAGGGGAGCCTGCGGCTTGCGACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 9; Length 1100;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; Score 1090.6;
; Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 99.6%;
Matches 1093; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; TYPE: DNA
; ORGANISM: Homo Sapien
US-09-905-291A-256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
```

g

ò

셤

ठ

a

ઠે

셤

ઠ

420

423

480

543

999 663

```
961 AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    964 AGCCTACCTGAGCCCATGCCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      64 GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGCGCCGTTATCAGGACCATGCGGCGCCG 123
                                                  GIGGAIGGICCAGITIGGCCAGCIGACTICCAIGCCAICCITCIGGAGCCTGCAGGCCTA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     904 CTCCTGGCCACTACTCTTTTTCCCTCTTCTCTGGGCTCTCCCCACTCCTGGGGCCCGGTCTG 963
                                                                                                                                                 CTGGGCACTCACGCGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG
                                                                                                                                                                                                                                                     364 CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGGAATTCACC
                                                                                                  GCAGGGAAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                     CTGGGCACTCACGCCGCCCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG
                                                                                                                                                                                                 304 GTGGATGGTCCAGTTTGGCCAGCTGCATCCATGCCATCCTTCTGGAGCCTGCAGGCCTA
                                                                                                                                                                                                                                  CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC
                                                                                                                                                                                                                                                                               CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                              424 CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                            484 CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGGTGACTCAGGTGGACCCTTGGCCTGTAA.CAAGGATGGACTGTGCTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             784 CGTCAGCTGGGGGAGTGGGCTGTGGGCCCCAATCGGCCCCGGTGTCTACACCAATATCAG
                                                                                    GCAGGGGAGCCTGCGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGTGAGCTGGGGAAGTGGGCTGTGGCCCAATCGGCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         844 CCACCACTTTGAGTGGATCCAGAAGCTGATGGCCCAGAGTGGCATGTCCCAGCAGGCCAGACCC
                                                                                                                                                                                                                                                                                                                                                                                          544 CTGGGGGTACATCAAAGAGGATGAGGCACTGCCCATCTCCCCACACCCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                          604 GGTCGCCATCATAAAACAACTCTATGTGCAACCTCTTCTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           664 GGACATCTTTGGAGACATGGTTTGTGCTGGCAACGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        724 CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGAATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTCCTGGCCGCTACTCTTTTTCCCTCTTCTCTGGGCTCTCCCACTCCTGGGGCCGGTCTG
                                                                                                                                                                                                                                                                                                                              481 CATCTGTCCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                               CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                             601 GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1084 AAAAAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         841 (
                                    121
                                                                                    181
                                                                                                          184
                                                                                                                                     241
                                                                                                                                                            244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           721
                                                                                                                                                                                  301
                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         781
                                                                                 à
                                                                                                       셤
                                                                                                                                  ò
                                                                                                                                                    ద
                                                                                                                                                                                ò
                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                යු
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ୍ପ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ceceegaaaaaaaaccaneeecececececececenecrecrecrecrecrecrecre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .0, Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 1100;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 1090.6;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 99.6%;
Matches 1093; Conservative
          Gao, Wei-Qiang
Gerber, Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
COGANISM: Homo Sapien
US-09-902-853-256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
```

780

840

843

900

RESULT

61 GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGCGGCGCCGTTATCAGGACCATGCGGCCG 120

à

```
961 AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            484 CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGTTTGAGACGGGACAGACTGCTGGGTGACTGG 543
                                                                                                                                                                                                                                                                        61 GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCG 120
                                                                                                                                                                                                                                                                                                  GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGCCG 123
                                                                                                                                                                                                                                                                                                                                                                 121 ACGGGTCATCACGTCGCGCATCGTGGGTGGAGAGGACGCCGAACTCGGGCGTTGGCCGTG 180
                                                                                                                                                                                                                                                                                                                                                                                         GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGGGCACTCACGCCGCGCCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC 423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     crargacarrecerregreaagerereredeacerereaceracarraaacacarecagee 483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCCTCCAGGAAGTTCA 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCCCCCACACCTCCAGGAAGTTCA 603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   601 GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CGGTGACTCAGGTGGACCCTTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              creciseccaeraereritrirecererieresecrereceaerereseceseses 963
                                                                                                                                                                                                                           CGTGAGCTGGGGAGTGGGCTGTGGTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCCAAGGCGGGAAGGATGCCTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGACATCTTTGGAGACATGGTTTGTGCTGGCAACGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                    ö
                                                                                       Length 1100
                                                                                                                                                                                CGCGGGAGAGGACCCATGGGCGCGCGCGCGGGCGCTGCTGCTGCTGCTGC
                                                                                                                                    4; Indels
                                                                                         DB 9;
                                                                                       Score 1090.6;
Pred. No. 0;
0; Mismatches
                                                                                    Query Match
Best Local Similarity 99.6%;
Matches 1093; Conservative
; TYPE: DNA
; ORGANISM: Homo Sapien
US-09-907-824-256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        544
                                                                                                                                                                                                                                                                                                                     64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         904
                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Pan, James
APPLICANT: Pan, James
APPLICANT: Pan, James
APPLICANT: Roy, Margaret Ann
APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, Williams, I.
APPLICANT: Mood, Milliams, I.
APPLICANT: Adda Encoding the Same
FILE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
FILE REFERENCE: 10466-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE REFERENCE: 10466-14

CURRENT APPLICATION NUMBER: US/09/907,824

CURRENT FILING DATE: 2001-07-17

PRIOR APPLICATION NUMBER: 09/665,350

PRIOR PILING DATE: 2000-09-18

PRIOR PILING DATE: 2000-02-22

PRIOR PILING DATE: 1999-07-26

PRIOR PILING DATE: 1999-07-26

PRIOR PILING DATE: 1999-07-26

PRIOR PILING DATE: 1999-07-26

PRIOR PILING DATE: 1999-07-28

PRIOR PILING DATE: 1999-07-28

PRIOR PILING DATE: 1999-09-08

PRIOR PILING DATE: 1999-09-08

PRIOR PILING DATE: 1999-09-08

PRIOR PILING DATE: 1999-09-13

PRIOR PILING DATE: 1999-09-15

PRIOR PILING DATE: 1999-10-05

PRIOR PILING DATE: 1999-10-05

PRIOR PILING DATE: 1999-10-05

PRIOR PILING DATE: 1999-11-29

PRIOR PILING DATE: 1999-12-02

PRIOR PILING DATE: 1999-12-03

PRIOR PILING D
              Sequence 256, Application US/09907824
Publication No. US20020197671A1
GENERAL INFORMATION:
APPLICANT: Genentech, Inc.
APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
                                                                                                                                                                                                                                                                                                                                                          Godowski, Paul J.
Grimaldi, Christopher J.
Gurney, Austin L.
Hillan, Kenneth, J.
                                                                                                                                                                                                 Ferrara, Napoleone
Filvaroff, Ellen
Fong, Sherman
                                                                                                                                                                                                                                                                                               Gerber, Hanspeter
Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kljavin, Ivar J.
Mather, Jennie P.
                                                                                                                                                      Desnoyers, Luc
Eaton, Dan L.
                                                                                                                                                                                                                                                                        Wei-Oiang
                                                                                                                                                                                                                                                                                                                                          Goddard, A.
                                                                                                                                                      APPLICANT:
APPLICANT:
                                                                                                                                                                                                                         APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT
```

243

63

720

723

```
US-09-907-841-256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             841
                                                                                                                                                                               셤
                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                   엄
                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
TCTTGTTTGGTAATAAACACATTCCAGTTGATGCCTTGCAGGGCATTTTTCAAAAAAA 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Gurmaly, Austin L.
APPLICANT: Gurmaly, Austin L.
APPLICANT: Gurmaly, Austin L.
APPLICANT: Millan, Kenneth, J.
APPLICANT: Millan, Kenneth, J.
APPLICANT: Millan, Kenneth, J.
APPLICANT: Millan, Millan, F.
APPLICANT: Paoni, Michola F.
APPLICANT: Paoni, Millang, F.
APPLICANT: Tumas, Daniel
APPLICANT: Tumas, Daniel
APPLICANT: Tumas, Daniel
APPLICANT: William, P. Mickey
APPLICANT: William, P. Mickey
APPLICANT: William, P. Mickey
APPLICANT: William, P. Mickey
APPLICANT: William, E. Mickey
APPLICANT: William, E. Mickey
APPLICANT: William, E. 2001-11-20
FRIOR FILING DATE: 2001-01-22
FRIOR APPLICATION NUMBER: US 60/143,048
FRIOR FILING DATE: 1999-07-07
FRIOR APPLICATION NUMBER: PCT/US99/2034
FRIOR FILING DATE: 1999-07-28
FRIOR FILING DATE: 1999-07-28
FRIOR FILING DATE: 1999-07-28
FRIOR APPLICATION NUMBER: PCT/US99/2034
FRIOR FILING DATE: 1999-07-38
FRIOR APPLICATION NUMBER: PCT/US99/21090
FRIOR FILING DATE: 1999-09-13
FRIOR APPLICATION NUMBER: PCT/US99/21090
FRIOR APPLICATION NUMBER: PCT/US99/21090
FRIOR FILING DATE: 1999-09-13
FRIOR APPLICATION NUMBER: PCT/US99/21090
FRIOR APPLICATION NUMBER: PCT/US99/21090
FRIOR FILING DATE: 1999-00-16
FRIOR APPLICATION NUMBER: PCT/US99/21090
FRIOR FILING DATE: 1999-00-16
FRIOR APPLICATION NUMBER: PCT/US99/21090
FRIOR FILING DATE: 1999-00-16
FRIOR FILING DATE: 1999-00-16
FRIOR APPLICATION NUMBER: PCT/US99/21090
FRIOR APPLICATION NUM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Remaining Prior Application data removed - See File Wrapper or PALM. NUMBER OF SEQ ID NOS: 423
SEQ ID NO 256
LENGTH: 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Goddard, A.
Godowski, Paul J.
Grimaldi, Christopher J.
Gurney, Austin L.
Hillan, Kenneth, J.
Kljavin, Ivar J.
Mather, James
Pan, James
Pan, Nicholas F.
                                                                                                                                                                                                                                                                                                        Sequence 256, Application US/09907841
Publication No. US20020198366A1
GENERAL INFORMATION:
                                                                                                                                                        1081 AAAAAAAAAAAAAA 1097
                                                                                                                                                                                                      1084 AAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ferrara, Napoleone
Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gerber, Hanspeter
Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Genentech, Inc.
APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
APPLICANT: Besnoyers, Luc
APPLICANT: Eaton, Dan L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Fong, Sherman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Homo Sapien
                         964
                                                                    1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
APPLICANT:
                                                                                                      g
                                                                                                                                                    ò
                                                                                                                                                                                          g
                                                                  ò
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          544 CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCCACACCTCCAGGAAGTTCA 603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         244 CTGGGCACTCACGGGGGGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         304 GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA 363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               604 GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA 663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CGTGAGCTGGGGAGTGGGCTGTGGTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAG 840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  904 chechesecherhererhringeererrerererererererererereresesecherere
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            423
                                                                                                                                                                                                                                                                                                                                63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         124 ACGGGTCATCACGTCGCGCATCGTGGGTGGACGCGCGAACTCGGGCGTTGGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   184 GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGGAGTGAGCCTGCTACCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GIGGATGGICCAGITITGGCCAGCTGCCATGCCATCCTTCTGGAGCCTGCAGGCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               364 CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACACAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 424 CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATCTGTCTCCAGGCCTCCACATTGAGTTTGAGAACGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      484 CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCGAACTCGGGCGTTGGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181 GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241 CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       661 GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     724 CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGAATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  784 CGTGAGCTGGGGAGTGGGCTGTGGTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                     1 CGCGGGAGAGAGGCCATGGGCGCGCGCGCGCGCTGCTGCTGCTGCTGCTGCTCGCTCG
                                                                                                                                                                                                                                                                                                                          4 cécédesadadadecerandes de cecece de cereca de cecece de cece de cece
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       541 CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       601 GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
     DB 9; Length 1100;
                                                                                                                ö
                                                                                                                Indels
                                                                                                          4;
Score 1090.6;
Pred. No. 0;
0; Mismatches
Query Match
Best Local Similarity 99.6%;
Matches 1093; Conservative
```

δ g

```
64 GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGGCGCCG 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGGATGGTCCAGTTTGGCCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   304 GIGGAIGGICCAGIIIGGCCAGCIGACTICCAIGCCAICCIICIGGAGCCIGCAGGCCIA 363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      781 CGTGAGCTGGGGATGGGCTGTGGTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAG 840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241 CTGGGCACTCACGGCGGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               364 CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC 423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        424 CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGGC 483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 604 GGTCGCCATCATAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA 663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTT 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     184 GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     244 CTGGGCACTCACGGCGGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  721 CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61 GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGCGGCGCCGTTATCAGGACCATGCGGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121 ACGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCCGAACTCGGGCGTTGGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181 GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTATGACATTGCCTTGGTGAAGCTGTCACACTGTCACCTACACTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        484 CATCTGTCTCCAGGCCTCCACATTTGAGTTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            664 GGACATCTTTGGAGACATGGTTTGTGCTGGCAACGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                             Length 1100;
                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                          4; Indels
                                                                                                                                                                                                                                                                                                                                                             DB 10;
                                                                                                                                                                                                                                                                                                                                                           Score 1090.6;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
PRIOR APPLICATION NUMBER: PCT/US99/30095
PRIOR FILING DATE: 1999-12-16
PRIOR FILING DATE: 1999-12-20
PRIOR FILING DATE: 1999-12-20
PRIOR APPLICATION NUMBER: PCT/US99/30919
PRIOR APPLICATION NUMBER: PCT/US09/30999
PRIOR APPLICATION NUMBER: PCT/US00/00219
PRIOR PLIING DATE: 1999-12-20
PRIOR PLIING DATE: 2000-01-05
SEQ ID NO 256
                                                                                                                                                                                                                                                                                                                                                        99.1%;
                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 99.6
Matches 1093; Conservative
                                                                                                                                                                                                                                                             ; TYPE: DNA
; ORGANISM: Homo Sapien
US-09-904-011-256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ଚ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                           1021 TCTTGTTTGGTAATAACACATTCCAGTTGATGCCTTGCAGGGATTTTTCAAAAAAA 1080
1024 TCTTGTTTGGTAATAAACACHTTCCAGTTGATGCCTTGCAGGGGATTTTTTAAAAAAAA 1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Williams, P. Mickey
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acide Encoding the Same
FILE REFERENCE: 10466-14
CURRENT APPLICATION NUMBER: US/09/904,011
CURRENT FILING DATE: 2001-07-11
PRIOR APPLICATION NUMBER: PCT/USO0/04414
PRIOR APPLICATION NUMBER: PCT/USO0/04414
PRIOR FILING DATE: 1999-07-07
PRIOR FILING DATE: 1999-07-08
PRIOR PRIOR APPLICATION NUMBER: US 60/146,222
PRIOR PRIOR OATE: 1999-07-08
PRIOR PRIOR DATE: 1999-09-08
PRIOR PRIOR DATE: 1999-09-08
PRIOR PRIOR DATE: 1999-09-18
PRIOR PRIOR DATE: 1999-09-18
PRIOR PRIOR DATE: 1999-09-18
PRIOR PRIOR DATE: 1999-09-18
PRIOR APPLICATION NUMBER: PCT/US99/20944
PRIOR APPLICATION NUMBER: PCT/US99/21090
PRIOR APPLICATION NUMBER: PCT/US99/21090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR PILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/21547
PRIOR PILING DATE: 1999-09-15
PRIOR PILING DATE: 1999-10-05
PRIOR PELING DATE: 1999-10-05
PRIOR PELING DATE: 1999-11-29
PRIOR PELING DATE: 1999-11-29
PRIOR PELING DATE: 1999-11-29
PRIOR PILING DATE: 1999-11-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 1999-11-30
APPLICATION NUMBER: PCT/US99/28564
FILING DATE: 1999-12-02
APPLICATION NUMBER: PCT/US99/28565
FILING DATE: 1999-12-02
                                                                                                                                                                                                                      RESULT 8
US-09-904-011-256
; Sequence 256, Application US/09904011
; Publication No. US20030003530A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.; APPLICANT: Ashkenazi, Avi; APPLICANT: Bestein, David; APPLICANT: Bestow, Luc.; APPLICANT: Bestow, David; APPLICANT: Baton, Dan L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Godowski, Paul J.
Grimaldi, Christopher J.
Gurney, Austin L.
Hillan, Kenneth, J.
Kljavin, Ivar J.
Pan, James
Pan, James
Pani, Nicholas F.
                                                                                                                   1081 AAAAAAAAAAAAAA 1097
                                                                                                                                                                  1084 AAAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Roy, Margaret Ann
Stewart, Timothy A.
Tumas, Daniel
Williams, P. Mickey
Wood, William, I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ferrara, Napoleone
Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gerritsen, Mary E.
Goddard, A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gerber, Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Fong, Sherman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
PRIOR
PRIOR
```

303

63

543 9 603

63

180

240

243

300

360

363

303

us-10-040-647-5.rnpb

```
121 ACGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCGAACTCGGGCGTTGGCCGTG
                                                                                                                                                              GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                                                               184 GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                                                                                                            CTGGGCACTCACGGCGGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCTTCCGG
                                                                                                                                                                                                                                             CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG
                                                                                                                                                                                                                                                                                            GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA
                                                                                                                                                                                                                                                                                                            GIGGAIGGICCAGITIGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA
                                                                                                                                                                                                                                                                                                                                                        CTACACCCGTTACTTCGTATCGAATATCTGTGGCCCTCGCTACCTGGGGGAATTCACC
                                                                                                                                                                                                                                                                                                                                                                            CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACTGGGGGAATTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                       CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                        424 CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CATCTGTCTCCAGGCCTCCACATTTGAGTTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     604 GGTCGCCATCATAAAAAAACAACTCTCTGCCACCTCTCTCAAGTACAGTTTCCGCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGACATCTTTGGAGACATGGTTTGTGCTGGCAACGCCCCAAGGCGGGAAGGATGCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    724 CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGAATGGACTGTGGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGTGAGCTGGGGATGGGCTGTGGTCGGCCCCAATCGGCCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          784 CGTGAGCTGGGAGTGGGCTGTGGCCCCAATCGGCCCGGTGTCTACACAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTCCTGGCCGCTACTTTTTCCCTCTTCTCTGGGCTCTCCCCACTCCTGGGGCCGGTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTCCTGGCCACTACTCTTTTTCCCTCTTCTCTGGGCTCTCCCACTCCTGGGGCCGGTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       964 AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1084 AAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAAAAAAAAAAAAA 1097
                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                            244
                                 61
                                                                                                                                                             181
                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                        364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1081
                                                                                                                                                                                                                                                                                                                          304
                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                        원
                                                                                                                                                                                                                                                    요
                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                   d
                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                 ò
                                                             원
                                                                                             ò
                                                                                                                                                             à
                                                                                                                                                                                       g
                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ..ary E.

.codowski, Paul J.

.cori Gridaldi, Christopher J.

.cori Hillan, Kenneth, J.

.cori Rabelicant: Rijavin, Ivar J.

.cori Paplicant: Pan, James

.cori Paplicant: Pan, James

.cori Paplicant: Pan, James

.cori Paplicant: Roy, Margaret Ann

.cori Applicant: Pan, James

.cori Applicant: Tunachy A.

.cori Applicant: Nilliam, I.

.cori Title Reference: 10466-14

.cori Title Reference: 10466-14

.cori Title Reference: 10466-14

.cori Title Reference: 10466-14

.cori Applicant: 100

.cori Prior Filling Date: 2001-09-18

.cori Dana

.cori Dana

.cori Length: 1100

.cori Type: Dana
                                                                                                                                                                                                                       AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1020
                                                                                                                                                                            ô
                                   900
                                                                 903
                                                                                                960
                                                                                                              904 CTCCTGGCCACTACTCTTTTTCCCTCTTCTCTGGGCTCTCCCACTCCTGGGGCCGGTCTG 963
784 CGTGAGCTGGGGAGTGGGCTGTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAG 843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                              901 CTCCTGGCCGCTACTCTTTTTCCCTCTTCTCTGGGCTCTCCCACTCCTGGGGCCGGTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCACCACTTTGAGTGGATCCAGAAGCTGATGGCCCAGAGTGGCATGTCCCAGACCAGACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 10; Length 1100;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
99.1%; Score 1090.6;
Best Local Similarity 99.6%; Pred. No. 0;
Matches 1093; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                   Application US/09903640
5. US20030017463A1
                                                                                                                                                                                                                                                                                                           1081 AAAAAAAAAAAAA 1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Genericech, Inc.
APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
APPLICANT: Besnoyers, Luc
APPLICANT: Baton, Dan L.
APPLICANT: Ferrara, Napoleone
APPLICANT: Filvaroff, Ellen
APPLICANT: Fong, Sherman
APPLICANT: Goo, Wei-Qiang
APPLICANT: Generitsen, Many E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
CRGANISM: Homo Sapien
US-09-903-640-256
                                                                                                                                                                                                                                                                                                                                                                                        JS-09-903-640-256
                                 841
                                                                                                                                                             961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -
                                                             유
                                                                                        ò
                                                                                                                        q
                                                                                                                                                         à
                                                                                                                                                                                       셤
                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                       ద
                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠ
                              Š
```

420

423

480

483

540

543 600 603 99 663 720

723

780

783

840

843

900

903

ö

Gapa

63

240

```
CTCCTGGCCGCTACTCTTTTCCCTTTCTCTGGGCTCTCCCACTCCTGGGGCCGGTCTG 960
                                                                                                                                                                                                                                                                        GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCG 120
                                                                                                                                                                                                                                                                                                                                                                    CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATGATCCCTCCGG 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTACACCCGTTACTTCGTATCGAATATCTGAGCCCTCGCTACCTGGGGAATTCACC 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACACCCTCCAGGAAGTTCA 603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGTGAGCTGGGGAGTGGGCTGTGGCTCGAATCGGCCCGGTGTCTACACCAATATCAG 840
                                                                                                                                                                                                                                                                                           ACGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCGAACTCGGGGCGTTGGCCGTG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                     cededadadadecentadecedecedecedecenterrecreecederecreered
                                                                                                                                                                                                                                                                                                                                                                                                                                          GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTGCTCAGCCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        carcrerectedesecrecaearrreagrireagaacegeaeagaerecreeres
                                                                                                                                                                                                                                                                                                                                                                                                                     GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTACACCCGTTACTTCGTATCGTATCTTGTCGCCCTCGCTACCTGGGGGATTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTTACACCATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCCCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGACATCTTTGGAGACATGGTTTGTGCTGGCAACGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 10; Length 1100;
                                                                                                                                                                 4; Indels
                                                                                                                          Score 1090.6; Pred. No. 0; 0; Mismatches
                                                                                                                           99.1%;
ilarity 99.6%;
Conservative
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 256
; LENGTH: 1100
; TYPE: DNA
; ORGANISM: Homo Sapien
US-09-908-093-256
                                                                                                                          Query Match
Best Local Similarity
Matches 1093; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         661
                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        484
                                                                                                                                                                                                                                                                                                            64
                                                                                                                                                                                                                                                                                                                                                                                                                                                         184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                          요
                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic IIILE OF INVENTION: Acids Encoding the Same FILE REFERENCE: 10466-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/09/908,093
CURRENT PILING DATE: 2001-07-17
PRIOR APPLICATION NUMBER: US/65,350
PRIOR FILING DATE: 2000-09-18
PRIOR FILING DATE: 2000-09-18
PRIOR FILING DATE: 2000-02-22
PRIOR FILING DATE: 1000-02-22
PRIOR FILING DATE: 1000-02-22
PRIOR FILING DATE: 1999-07-07
PRIOR FILING DATE: 1999-07-26
PRIOR FILING DATE: 1999-07-26
PRIOR PRILING DATE: 1999-07-26
PRIOR PILING DATE: 1999-07-26
PRIOR PILING DATE: 1999-09-08
PRIOR FILING DATE: 1999-09-08
PRIOR FILING DATE: 1999-09-08
PRIOR FILING DATE: 1999-09-13
PRIOR FILING DATE: 1999-09-13
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/21090
PRIOR FILING DATE: 1999-09-15
PRIOR FILING DATE: 1999-09-15
PRIOR PILING DATE: 1999-09-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: PCT/US99/28313
PRIOR PILING DATE: 1999-11-30
PRIOR PLING DATE: 1999-12-02
PRIOR PELICATION NUMBER: PCT/US99/28564
PRIOR PELICATION NUMBER: PCT/US99/28565
PRIOR APPLICATION NUMBER: PCT/US99/30095
PRIOR PILING DATE: 1999-12-16
PRIOR PLILING DATE: 1999-12-16
PRIOR PILING DATE: 1999-12-16
PRIOR PILING DATE: 1999-12-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PILING DATE: 1999-12-20
APPLICATION NUMBER: PCT/US99/30999
FILING DATE: 1999-12-20
APPLICATION NUMBER: PCT/US00/00219
FILING DATE: 2000-01-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: PCT/US99/23089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 1999-10-05
APPLICATION NUMBER: PCT/US99/28214
                              RESULT 10
US-09-908-093-256
; Sequence 256, Application US/09908093
; Publication No. US20030017498A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                      Godowski, Paul J.
Grimaldi, Christopher J.
Gurney, Austin L.
Hillan, Kenneth, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Williams, P. Mickey Wood, William, I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Roy, Margaret Ann
Stewart, Timothy A.
Tumas, Daniel
                                                                                                                                                                                                                  Ferrara, Napoleone
Filvaroff, Ellen
Fong, Sherman
                                                                                                                                                                                                                                                                                                                                                                                               Hillan, Kenneth, J.
Kljavin, Ivar J.
Mather, Jennie P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pan, James
Paoni, Nicholas F.
                                                                                                                                                                                                                                                                                                          Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                         Gerber, Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LING DATE: 1999-11-29
                                                                                                                      APPLICANT: Genentech, Inc.
APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
APPLICANT: Eaton, Dan L.
                                                                                                                                                                                                                                                                      Wei-Qiang
                                                                                                                                                                                                                                                                                                                           Goddard, A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
PRIOR
PRIOR
```

480

423

363

483

540

543

900

999

663

720

780

783

843

g

Š ద

δ 셤 8

```
120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  64 GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGCGGGCGCGTTATCAGGACCATGCGGCCG 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 721 CGGTGACTCAGGTGGACCCTTTGGCCTGTACAAGGATGGACTGTGGTATCAGATTGGAGT 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121 ACGGGTCATCACGTCGCGCATCGTGGGTGGACGCCCGAACTCGGGCGTTGGCCGTG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     124 ACGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCCGAACTCGGGCGTTGGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       364 CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181 GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   244 CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATGATCCCTCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              424 CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        484 CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          601 GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             184 GCAGGGGAGCCTGCGCCCTGTGGGATTCCCCACGTATGCGGGGTGAGCCTGCTCACCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  304 GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 544 CTGGGGGTACATCAAAGAGGATGAGGCACTGCCCACTCCCCCACCCCCCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     604 GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   664 GGACATCTTTGGAGACATGGTTTGTGCTGGCAACGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      661 GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCCAAGGCGGGGAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACACAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 10; Length 1100;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 1090.6;
Pred. No. 0;
0; Mismatches
PRIOR FILING DATE: 1999-11-30
PRIOR APPLICATION NUMBER: PCT/US99/28564
PRIOR PILING DATE: 1999-12-02
PRIOR APPLICATION NUMBER: PCT/US99/28565
PRIOR FILING DATE: 1999-12-02
PRIOR FILING DATE: 1999-12-16
PRIOR PILING DATE: 1999-12-16
PRIOR PLING DATE: 1999-12-20
PRIOR PILING DATE: 1999-12-20
PRIOR PILING DATE: 1999-12-20
PRIOR FILING DATE: 2000-01-05
NUMBER OF SEQ ID NOS: 423
SEQ ID NO 256
FILING DATE: 2000-11-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99.1%;
99.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 99.6'
Matches 1093; Conservative
                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
CORGANISM: Homo Sapien
US-09-906-742-256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                  964 AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTTGGTTCTTCTG 1023
                                                                                                                                                                                    904 CTCCTGGCCACTACTCTTTTTCCCTCTTCTGGGCTCTCCCACTCTGGGGCCGGTCTG 963
                                                                                                                                                        APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
                                                            961 AGCCTACCTGAGCCCATGCAGCCTGGGGCCCACTGCCAAGTCAGGCCCTGGTTCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT FILING DATE: 2001-07-16
PRIOR APPLICATION NUMBER: US/09/906,742
CURRENT FILING DATE: 2001-07-16
PRIOR APPLICATION NUMBER: 09/665,350
PRIOR APPLICATION NUMBER: PCT/US00/04414
PRIOR FILING DATE: 2000-02-22
PRIOR FILING DATE: 1999-07-07
PRIOR PLILNG DATE: 1999-07-07
PRIOR FILING DATE: 1999-07-26
PRIOR FILING DATE: 1999-07-26
PRIOR FILING DATE: 1999-07-26
PRIOR FILING DATE: 1999-07-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1999-10-05
PPLICATION NUMBER: PCT/US99/28214
FILING DATE: 1999-11-29
APPLICATION NUMBER: PCT/US99/28313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: PCT/US99/20594
PRIOR FILING DATE: 1999-09-08
PRIOR APPLICATION NUMBER: PCT/US99/20944
PRIOR FILING DATE: 1999-09-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: PCT/US99/21090 FILING DATE: 1999-09-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: PCT/US99/23089
                                                                                                                                                                                                                                                                                                                                                                                                                      Application US/09906742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Godowski, Paul J.
Grimaldi, Christopher J.
Gurney, Austin L.
Hillan, Kenneth, J.
                                                                                                                                                                                                                                                     1081 AAAAAAAAAAAAAA 1097
                                                                                                                                                                                                                                                                                                     1084 AAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                 ESULT ...
JS-09-906-74.

i Sequence 256, Apr.
i Publication No. US200.
i GENERAL INFORMATION:
i APPLICANT: Genethech, Inc.
i APPLICANT: Botstein, David
APPLICANT: Betstein, David
TCANT: Eaton, Dan L.
Eaton, Dan L.
TRANT: Eaton, Dan L.
TRANT: Eaton, Dan L.
TRANT: TEATON, Napole, TEATON, DAN L.
TRANT: TEATON, DAN L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pan, James
Paoni, Nicholas F.
Roy, Margaret Ann
Stewart, Timothy A.
Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gerritsen, Mary E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1999-09-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gerber, Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kljavin, Ivar J.
Mather, Jennie P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Fong, Sherman
Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Goddard, A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                      1021
```

```
61 GCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGCCCCCTTATCAGGACCATGCGGCCG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121 ACGGGTCATCACGTCGCGCATCGTGGGTGGAGAGGACGCCGAACTCGGGCGTTGGCCGTG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGGATGGTCCAGTTTGGCCAGCTGAGTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA 363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGGTGACTGG 543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCAGGGGGGCCTGCGCATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cresecactoacecececactecriticaaacciatacreaccitaciaerearecerece
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  364 cracaccerracrregraregararerarereagecerecraceraceaarreace
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 craricacarriccrricgricascricricacaccricricaccracacrasacacarccaccc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 10; Length 1100;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4; Indels
PRIOR APPLICATION NUMBER: PCT/US99/20594
PRIOR FILING DATE: 1999-00-08
PRIOR PLING DATE: 1999-00-08
PRIOR PLING DATE: 1999-09-13
PRIOR PLING DATE: 1999-09-13
PRIOR PLING DATE: 1999-09-15
PRIOR PLING DATE: 1999-09-15
PRIOR PLING DATE: 1999-09-15
PRIOR PLING DATE: 1999-09-15
PRIOR PRILING DATE: 1999-09-15
PRIOR PRILING DATE: 1999-10-05
PRIOR PLING DATE: 1999-10-05
PRIOR PLING DATE: 1999-11-29
PRIOR PLING DATE: 1999-11-29
PRIOR PLING DATE: 1999-11-20
PRIOR PLING DATE: 1999-11-20
PRIOR PLING DATE: 1999-11-00
PRIOR PLING DATE: 1999-11-00
PRIOR PLING DATE: 1999-11-00
PRIOR PLING DATE: 1999-11-00
PRIOR PLING DATE: 1999-12-0
PRIOR PLING DATE: 1990-12-0
PRIOR PLING DATE: 1999-12-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99.1%; Score 1090.6; 99.6%; Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0, Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity 99.6
Matches 1093; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; TYPE: DNA
; ORGANISM: Homo Sapien
US-09-906-838-256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1021 TCTTGTTTGGTAATAAACACATTCCAGTTGATGCCTTGCAGGGCATTTTTCAAAAAAA 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                      AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         964 AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTTCTG 1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            900
                                                                                                                                                                                                                                                                                                                            960
                                                                                                840
                                                                                                                                                     843
                                                                                                                                                                                                                                                                     903
                                                                                                                                                                                                                                                                                                                                                                                 CTCCTGGCCACTACTCTTTTTCCCTCTTCTCTGGGCTCTCCCACTCCTGGGGCCGGTCTG 963
                                         CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGAATGGACTGTGGTATCAGATTGGAGT 783
                                                                                                                                                                                                                                             844 CCACCACTITGAGIGGAICCAGAAGCIGAIGGGCCCCAGAGIGGCAIGICCCAGACCC
                                                                                                                                                     cercascrecescrecercrececces
                                                                                                                                                                                                                                                                                                                          CTCCTGGCCGCTACTCTTTTTCCCTCTTCTCTGGGCTCTCCCACTCCTGGGGCCGGTCTG
                                                                                             CGTGAGCTGGGGAGTGGGCTGTGGTCGGCCCAATCGGCCCCGGTGTCTACACAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Tumes, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REPERENCE: 10466-14
                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/09/906,838
CURRENT FILING DATE: 2001-07-16
PRIOR APPLICATION NUMBER: 09/665,350
PRIOR FILING DATE: 2000-09-18
PRIOR FILING DATE: 2000-02-22
PRIOR APPLICATION NUMBER: PCT/US00/0414
PRIOR PILING DATE: 1909-07-07
PRIOR APPLICATION NUMBER: US 60/143,048
PRIOR PILING DATE: 1999-07-07
PRIOR APPLICATION NUMBER: US 60/145,698
PRIOR PILING DATE: 1999-07-26
PRIOR APPLICATION NUMBER: US 60/146,222
PRIOR PILING DATE: 1999-07-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 256, Application US/09906838 Publication No. US20030027143A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Godowski, Paul J.
Grimaldi, Christopher J.
Gurney, Austin L.
Hillan, Kenneth, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1081 AAAAAAAAAAAAA 1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1084 AAAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ferrara, Napoleone
Filvaroff, Blen
Fong, Sherman
Gao, Wei-Glang
Gerber, Hanspeter
Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Roy, Margaret Ann
Stewart, Timothy A.
Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Paoni, Nicholas F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Kljavin, Ivar J.
Mather, Jennie P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ashkenazi, Avi
Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Desnoyers, Luc
Eaton, Dan L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Goddard, A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            James
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-906-838-256
                                                                                                                                                                                                                                                                                                                                                                                 904
                                                                                                                                                                                                                                                                                                                                                                                                                                         961
                                                                                                                                                     784
                                         724
                                                                                             781
                                                                                                                                                                                                             841
                                                                                                                                                                                                                                                                                                                       901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                          ઠ
                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠ
```

300

303

243

63

Gaps

420

423

480

us-10-040-647-5.rnpb

```
121 ACGGGTCATCACGTCGCGCATCGTGGGTGGAGAGGACGCCGAACTCGGGCGTTGGCCGTG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          304 GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA 363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361 CTACACCCGTTACTTCGTATCGAATATCTGAGCCCTCGCTACCTGGGGAATTCACC 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61 GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCGCTTATCAGGACCATGCGGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       64 GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        184 GCAGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         244 cresscacreacescescescrestricaracerarasterescriasterescresses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181 GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 1100;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 1090.6;
Pred. No. 0;
0; Mismatches
FILE REFERENCE: 10466-14

CURRENT APPLICATION NUMBER: US/09/907,613

CURRENT FILING DATE: 2001-07-17

PRIOR APPLICATION NUMBER: PCT/US00/04414

PRIOR PILING DATE: 1999-07-07

PRIOR PILING DATE: 1999-07-07

PRIOR PILING DATE: 1999-07-26

PRIOR PILING DATE: 1999-07-26

PRIOR PILING DATE: 1999-07-26

PRIOR PILING DATE: 1999-07-26

PRIOR PILING DATE: 1999-09-08

PRIOR PILING DATE: 1999-09-08

PRIOR PILING DATE: 1999-09-13

PRIOR PILING DATE: 1999-09-13

PRIOR PILING DATE: 1999-09-15

PRIOR PILING DATE: 1999-11-29

PRIOR PILING DATE: 1999-11-30

PRIOR PILING DATE: 1999-12-02

PRIOR PILING DATE: 1999-12-03

PRIOR PILING DATE: 1999-13-03

PRIOR PILING DATE: 1999-13-03

PRIOR PILIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 99.6
Matches 1093; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Homo Sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-907-613-256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   961 AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCTTGTTTGGTAATAAACACATTCCAGTTGATGCCTTGCAGGGCATTTTTCAAAAAAA 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99
                                                                                                                                                                                                         720
                                                                                                                                                                                                                                                                                                          780
                                                                                                                                                                                                                                                                                                                                                                                                        840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  603
                                                                                                                                                        663
                                                                                                                                                                                                                                                         723
                                                                                                                                                                                                                                                                                                                                                        783
                                                                                                                                                                                                                                                                                                                                                                                                                               CGTGAGCTGGGGAGTGGGCTGTGGTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAG 843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTCCTGGCCGCTACTCTTTTTCCCTCTTCTCTGGGCTCTCCCACTCCTGGGGCCGGTCTG 960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTCCTGGCCACTACTCTTTTTTCCCTCTTCTCTGGGCTCTCCCCACTCCTGGGGCCGGTCTG 963
          CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCCTCCAGGAAGTTCA
                                      CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACCTCCAGGAAGTTCA
                                                                                                        GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                              604 GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                    CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                     724 CGCTGACTCAGGTGGACCCTTGGCCTGTAACAAGAATGGACTGTGCTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                     CGTGAGCTGGGGGCTGTGGTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Stewart, Timothy A. APPLICANT: Stewart, Timothy A. APPLICANT: Tunms, Daniel APPLICANT: Williams, P. Mickey APPLICANT: Williams, P. Mickey APPLICANT: Wood, William, II III TILE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF: INVENTION: Acids Encoding the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 256, Application US/09907613
Publication No. US20030027145A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Godowski, Paul J.
Grimaldi, Christopher J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1084 AAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAAAAAAAAAAAAAA 1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eaton, Dan L.
Ferrara, Napoleone
Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gurney, Austin L.
Hillan, Kenneth, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nicholas F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gerber, Hanspeter
Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kljavin, Ivar J.
Mather, Jennie P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Roy, Margaret Ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Genentech, Inc.
APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Fong, Sherman
Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Goddard, A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pan, James
Paoni, Nicl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -09-907-613-256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1021
                                                          544
                                                                                                        601
                                                                                                                                                                                                                                                                                                       721
                                                                                                                                                                                                                                                                                                                                                                                                     781
                                                                                                                                                                                                                                                                                                                                                                                                                                                      784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     904
                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                  g
                                                                                                        ò
                                                                                                                                              셤
                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                  원
                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
```

300

63

Gaps

```
61 GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGCCGCTTATCAGGACCATGCGGCCG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCAGGGAAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACC 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121 ACGGGTCATCACGTCGCGCATCGTGGGTGGAGAGGACGCCGAACTCGGGCGTTGGCCGTG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         124 ACGGCTCATCACGTCGCGCATCGTGGGGGGGGGGGGCGCCGAACTCGGGCGTTGCCCGTG 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 10; Length 1100;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
99.1%; Score 1090.6;
Best Local Similarity 99.6%; Pred. No. 0;
Matches 1093; Conservative 0; Mismatches
                                                                                  Williams, P. Mickey Wood, William, I.
                                               Roy, Margaret Ann
Stewart, Timothy A.
Tumas, Daniel
Kljavin, Ivar J.
Mather, Jennie P.
Pan, James
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
CRGANISM: Homo Sapien
US-09-907-942-256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEO ID NO 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        961 AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     964 AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1024 rchighrichannanachcarrccagrigargcchigcaggcarrchananana 1083
                                                                                                                                                                                                                                                                                                                                                                                                                                       CTCCTGGCCGCTACTCTTTTCCCTCTTCTCTGGGCTCTCCCCACTCCTGGGGCCCGGTCTG
                                    480
                                                                                     540
                                                                                                                                     600
                                                                                                                                                                                      660
                                                                                                                                                                                                720
                                                                                                                                                                                                                                                  GGACATCTTTGGAGACATGGTTTGTGCTGGCAACGCCCCAAGGCGGGAAGGATGCCTGCTT 723
                                                                                                                                                                                                                                                                                                                                                     784 CGTGAGCTGGGGGTGTGGGCTGTCGCCCCAATCGGCCCCGGTGTCTACACCAATATCAG 843
                                                                                                                                                                                                                                                                                                                                                                                                      483
                                                                                                                                                            544 CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCCCTCCAGGAAGTTCA 603
                                                                                                                                                                                                                                                                                     CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT 780
                                                                                                                                                                                                                                                                                                    CGTGAGCTGGGGAGTGGGCTGTGGTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAG 840
                                                                                                                                                                                                                                                                                                                                                                                         CTCCTGGCCACTACTCTTTTTCCCTCTTCTCTGGGCTCTCCCACTCCTGGGGCCGGTCTG 963
                                    CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACACCCAGCC
                                                      CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                            CTGGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCTCCAGGAAGTTCA
                                                                                                                                                                                      GGTCGCCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                      GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 256, Application US/09907942
Publication No. US20030027146A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gerritsen, Mary E.
Goddard, A.
Godowski, Paul J.
Grimaldi, Christopher J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1084 AAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1081 AAAAAAAAAAAAA 1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gurney, Austin L.
Hillan, Kenneth, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Genertech, Inc.
APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
APPLICANT: Botstein, Dan L.
APPLICANT: Eaton, Dan L.
APPLICANT: Ferrara, Napoleone
APPLICANT: Filvanoff, Blien
APPLICANT: Fong, Sherman
APPLICANT: Goo, Wei-Qiang
APPLICANT: Gerber, Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Fong, Sherman
Gao, Wei-Qiang
Gerber, Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 14
US-09-907-942-256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                         841
            364
                                    421
                                                                                     481
                                                                                                           484
                                                                                                                                   541
                                                                                                                                                                                    601
                                                                                                                                                                                                             604
                                                                                                                                                                                                                                      661
                                                                                                                                                                                                                                                             664
                                                                                                                                                                                                                                                                                     721
                                                                                                                                                                                                                                                                                                              724
                                                                                                                                                                                                                                                                                                                                     781
                                                                                                                                                                                                                                                                                                                                                                                                                                       901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
APPLICANT:
                                                                                                         g
                                                                                                                                                       셤
                                                                                                                                                                                                            유
                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                              윱
                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                ઠે
                                                                                                                                   8
                                                                                                                                                                                   ठ
                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠ
```

ö

123

g

셤 à 셤 8

8

ò 셤 à g à g ð 셤 à 셤 8 g 8 ઠ

8

ò 셤

```
APPLICANT: Stewart, Timocny A.
APPLICANT: Tunnas, Daniel
APPLICANT: Wood, Milliam, P. Mickey
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
CURRENT FILING DATE: 10466-14
CURRENT FILING DATE: 10466-14
CURRENT FILING DATE: 2001-07-12
PRIOR FILING DATE: 2000-09-18
PRIOR FILING DATE: 2000-09-18
PRIOR FILING DATE: 10400-09-18
PRIOR FILING DATE: 10400-09-18
PRIOR FILING DATE: 10400-09-18
PRIOR FILING DATE: 10400-09-18
PRIOR FILING DATE: 1040-07-12
PRIOR PELING DATE: 1040-07-12
PRIOR PELING DATE: 1040-07-12
PRIOR PELING DATE: 1040-07-12
PRIOR APPLICATION NUMBER: PCT/US99/2054
PRIOR PELING DATE: 1040-07-12
PRIOR APPLICATION NUMBER: PCT/US99/2054
PRIOR PELING DATE: 1040-07-12
PRIOR APPLICATION NUMBER: PCT/US99/2061
PRIOR PELING DATE: 1049-11-29
PRIOR PELING DATE: 1049-11-29
PRIOR PELING DATE: 1049-11-29
PRIOR PELING DATE: 1049-11-20
PRIOR PELING DATE: 1049-11-20
PRIOR PELING DATE: 1049-11-20
PRIOR PELING DATE: 1049-11-20
PRIOR PELING DATE: 1040-12-20
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 CGCGGGAGAGAGCCATGGGCGCGCGCGGCGCTGCTGCTGCTGCTGCTGCTGCTCG 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 1100;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
99.1%; Score 1090.6;
Best Local Similarity 99.6%; Pred. No. 0;
Matches 1093; Conservative 0; Mismatches
                                                                                                                                                                                                                                                    Godowski, Paul J.
Grimaldi, Christopher
                                                                                                                                                                                                                                                                                                                     Gurney, Austin L.
Hillan, Kenneth, J.
Kljavin, Ivar J.
Mather, Jennie P.
Pan, James
Paoni, Nicholas F.
Roy, Margaret Ann
          Ferrara, Napoleone
Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Stewart, Timothy A
                                                                                                                                                                                      Gerritsen, Mary E.
                                                                                                             Gao, Wei-Qiang
Gerber, Hanspeter
                                                                                                                                                                                                               Goddard, A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; ORGANISM: Homo Sapien
US-09-904-859-256
                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
APPLICANT:
                                                                                                                                              APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGCCTACCTGAGCCCATGCGGCCTGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                              303
                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                       420
                                                                                                                                                                                                                                                                                                                                                                                          480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTAAACACACATCCAGCC 483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTCCTGGCCACTACTCTTTTTTCCCTCTTCTGGGCTCTCCCCACTCCTGGGGCCGGTCTG 963
GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGTGAGCTGGGGGAGTGGGCTGTGGTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAG 843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CATCTGTCTCCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGACATCTTTGGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTCCTGGCCGCTACTCTTTTTCCCTCTTCTCTGGGCTCTCCCACTCCTGGGGCCGGTCTG
                                                                                                                                          244 chececachecececececachecriticaaacharacharachiachearchece
                                                                                                                                                                                                               GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA
                                                                                                                                                                                                                                                                                                                                                          CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGGAATTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACACTAAACACACAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CATCTGTCTCCAGGCCTCCACATTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGACATCTTTGGAGACATGGTTTGTGCTGGCAACGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGGTGACTCAGGTGGACCCTTGGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           724 cigrical caracteristic contracta can a contracta can contract contracta 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGTGAGCTGGGGGTGGGTCGGCCCCAATCGGCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCACCACTITGAGIGGATCCAGAAGCTGATGGCCCAGAGTGGCCATGICCCAGCCAGACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 256, Application US/09904859
Publication No. US20030036060A1
GENERAL INFORMATION:
APPLICANT: Genentech, Inc.
APPLICANT: Ashkenazi, Avi
APPLICANT: Desteain, David
APPLICANT: Besteain, David
APPLICANT: Bestoon, Dan I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1081 AAAAAAAAAAAAAA 1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 15
US-09-904-859-256
       184
                                                                        241
                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                 304
                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                           364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
```

qq		Db 1084 AAAAAAAAAAAAAA 1100
& 8	61 GGCTGGACTCAGGAAGCCGGAAGTCGCAGGAGGCGGCCGTTATCAGGACCATGCGGCCG 120 	Search completed: March 5, 2005, 15:38:10 Job time : 727.188 secs
& 8	121 ACGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCGAACTCGGGCGTTGGCCGTG 180 	
දු පු	181 GCAGGGACCTGCCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCACCACCG 240	
<u>ک</u> ۾	241 CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCTCCGG 300 	
중 원	301 GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA 360	
දු පු	361 CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC 420 	
දු පු	421 CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC 480	
දු පු	481 CAICHGICTCCCAGGCCTCCACAITTGAGTTTGAGAACCGGACAGACTGGTGGGTGACTGG 540	
දු පු	541 CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCCTCCAGGAAGTTCA 600 	
& g	601 GGTCGCCATCATAAACAACTCTATGGAACCACCTCTTCCTCAAGTACAGTTTCCGCAA 660 	
P Q	661 GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTT 720 	
දු පු	721 CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGGT 780 	
දු පු	781 CGTGAGCTGGGGAGTGGGCTGTGGTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAG 840 	
<u>ራ</u> ብ	841 CCACCACTTTGAGTGGATCCAGAAGCTGATGGCCCAGAGTGGCATGTCCCAGCCAG	
දු පු	901 CTCCTGGCCGCTACTCTTTTTCCCTCTTCTGGGCTCTCCCACTCCTGGGCCGGTCTG 960 	
& 8	961 AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTTCTG 1020	;
රු සි	1021 TCTTGTTTGGTAATAACACATTCCAGTTGATGCCTTGCAGGGGATTTTTCAAAAAAA 1080 	
ò	1081 AAAAAAAAAAAAA 1097 	

(otqsu) Anole Blank (uspto)

```
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: linear MOLECULE TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
NAME/KEY: CDS
                               128.4
125.8
1119.6
1119.6
1119.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 256, App
Sequence 25, App
Sequence 25, App
Sequence 27, Appl
Sequence 27, Appl
Sequence 27, Appl
Sequence 26, App
                                                                                           March 4, 2005, 22:18:30 ; Search time 205.888 Seconds
    (without alignments)
    8742.154 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed and is derived by analysis of the total score distribution.
                                                                                                                                                           Description
                                                                                                                                                                                                                                                                                                           2405568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1: /cgn2_6/ptodata/1/ina/5A_COMB.seq:*
2: /cgn2_6/ptodata/1/ina/5B_COMB.seq:*
3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
6: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
Gencore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-023-942A-5
US-09-907-794A-256
US-09-905-125A-256
US-09-902-775A-256
US-09-903-603A-256
US-09-903-903-603-256
US-09-909-064-256
US-09-909-064-256
US-09-909-064-256
US-09-908-618-256
US-09-023-942A-3
US-09-023-942A-3
US-09-023-942A-25
US-09-023-942A-2
US-09-023-942A-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-903-603A-262
US-09-904-920A-262
US-09-909-064-262
                                                                                                                                                                                                                                                                                                         Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                         1202784 segs, 818138359 residues
                                                                                                                                                                                                                                                                                                                                                                                        Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                               OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                            IDENTITY NUC Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Issued Patents NA:*
                                                                                                                                                                                                                                                                                                                                          Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query
Match Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                43.8
32.0
15.3
15.0
                                                                                                                                                           Title:
Perfect score:
Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1090.6
1090.6
1090.6
1090.6
1090.6
1090.6
1090.6
1078
1078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              482.2
351.6
168.2
165
164.8
                                                                                                                                                                                                                            Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Database :
                                                                                                                                                                                                                                                                             Searched:
                                                                                               Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Š.
```

```
28 133 12.1 1378 4 US-09-905-381A-262 Sequence 262, App 29 133 12.1 1378 4 US-09-906-618-262 Sequence 262, App 30 133 12.1 1378 4 US-09-906-618-262 Sequence 2.4 App 131 125.4 11.7 1166 3 US-09-386-629-1 Sequence 1, Appli 32 125.8 11.7 1166 3 US-09-386-629-2 Sequence 2, Appli 33 119.6 10.9 2440 4 US-09-949-016-5210 Sequence 5210, App 34 119.6 10.9 2440 4 US-09-949-016-5211 Sequence 5210, App 36 119.6 10.9 2440 4 US-09-949-016-5211 Sequence 5212, App 36 119.4 10.9 1142 3 US-09-949-016-5212 Sequence 5212, App 36 119.4 10.9 1142 3 US-09-386-642-7 Sequence 5212, Appli 37 119.4 10.9 1169 2 US-09-949-016-5212 Sequence 14, Appli 39 117 10.6 1108 2 US-09-948-016-366A-14 Sequence 16, Appli 40 115.4 10.5 1137 2 US-09-978-404B-13 Sequence 17, Appli 41 115.4 10.5 1137 2 US-09-978-404B-13 Sequence 11, Appli 42 114.8 10.4 1741 4 US-10-177-661-3 Sequence 11, Appli 44 US-09-870-002-1 Sequence 11, Appli 45 114.8 10.4 1748 4 US-09-870-002-1 Sequence 11, Appli 45 114.8 10.4 1615 4 US-09-820-002-1 Sequence 11, Appli 45 114.8 10.4 1615 4 US-09-820-002-1
```

WESON.

JEACHORE S, APPLICATION US/09023942A

JEACHOLE S, APPLICATION US/09023942A

JEACHOLE S, APPLICATION US/09023942A

JEACHALL INPORMATION:

TITLE OF INVENTION:

NUMBER OF SEQUENCES:

CORRESPONDENCE ANDRESS:

ADDRESSE:

STREE: 400 GANEBR CITY FLAZA

STATE: NEW YORK

STATE: NEW YORK

STATE: NEW YORK

COUNTRY: USA

COUNTRY: USA

COUNTRY: USA

COUNTRY: USA

COUNTRY: 11530

COMMUTER READABLE FORM:

MEDION TYPE: Flopy disk

COMMUTER: PELCATION NATA:

APPLICATION: WHORER: US/09/023,942A

FILING DATE: 13-FEB-1999

CLASSIFCANION: 435

PRIOR APPLICATION NATA:

APPLICATION NUMBER: POSION/97

FILING DATE: 13-FEB-1999

APPLICATION NUMBER: INTERNATION:

MARE: DIGIGLION: FRANK S

FILING DATE: 13-FEB-1999

ATORNEY/AGENT TROCKMATION:

FRERENCE CONTRY NUMBER: 11168

TELECOMMUTCATION NUMBER: 11168

```
1081 AAAAAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                          Godowski, Paul J.
Grimaldi, Christopher J.
                                                                                                                                                                                                                                                                                                                                                                                                                     Gurney, Austin L.
Hillan, Kenneth, J.
Kljavin, Ivar J.
Mather, Jennie P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Stewart, Timothy A.
                                                                                                                                                                                                                                                                                              Ferrara, Napoleone
Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                   Gerber, Hanspeter
Gerritsen, Mary E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pan, James
Paoni, Nicholas F.
Roy, Margaret Ann
                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICANT: Genentech, Inc.
APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
APPLICANT: Besnoyers, Luc
                                                                                                                                                                                                                                                                                                                         Fong, Sherman
Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT
                                                       셤
                                                                                  ò
                          8
                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1020
                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               900
                                                                                                                                                     120
                                                                                                                                                                                 120
                                                                                                                                                                                                            180
                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                                                                                                                                     420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTCCTGGCCGCTACTCTTTTTCCCTCTTCTGGGCTCTCCCCACTCCTGGGGCCCGGTCT 960
                                                                                                                                                                                                                                                                                                                        CTGGGCACTCACGGCGCGCCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCTCCGG 300
                                                                                                                                                                                                                                                                                                                                                                                                        Gregarderccaerrregeccaecreaerrecareccarecraegaeccrecaegecra 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTACACCCGTTACTTCGTATCGAATATCTGAGCCCTCGCTACCTGGGGAATTCACC 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       900
                                                                                                                         9
                                                                                                                                                                    GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCGTTATCAGGACCATGCGGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                     CTACACCCGTTACTTCGTATCGAATATCTGAGCCCTCGCTACCTGGGGAATTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCTCCAGGAAGTTCA
                                                                                                                         GCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCG
                                                                                                                                                                                                           121 ACGGGTCATCACGTCGCGCATCGTGGAGAGGACGCCGAACTCGGGCGTTGGCCGTG
                                                                                                                                                                                                                                                                GCAGGGGAGCCTGCGCGTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                                                                                                                                                                   GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCCTAGCCACCG
                                                                                                                                                                                                                                                                                                                                                   CTGGGCACTCACGGCGGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG
                                                                                                                                                                                                                                                                                                                                                                             GIGGAIGGICCAGITIGGCCAGCIGACITCCAIGCCAICCITCIGGAGCCIGCAGGCCIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGTGAGCTGGGGGTGTGGTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGTGAGCTGGGGAGTGGGCTGTGGTCGGCCCAATCGGCCCGGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ccaccactricagicarccagagcigargeccagaccagagcargicagccagacac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACACCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGGTGACTCAGGTGGACCCTTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT
                                                                    ö
                                           Length 1100;
                                                                     Indels
                                                                                               CGCGGGAGAGGCCATGGGCGCGCGCGGGGCGCTGCTGCTGGCGC
                                       ; Score 1100; DB 4;
; Pred. No. 6.5e-295;
0; Mismatches 0;
                                        100.0%;
                                       Query Match 100.
Best Local Similarity 100.
Matches 1100; Conservative
17..961
LOCATION:
     US-09-023-942A-5
                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           901
                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 961
                                                                                                                  g
                                                                                                                                                                                                      ò
                                                                                                                                                                                                                               요
                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                     ઠ
                                                                                                                                                                                                                                                                                                                                             요
                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
```

٠٢;

```
1021 TCTTGTTTGGTAATAACACATTCCAGTTGATGCCTTGCAGGGCATTTTTCAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Tumas, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              THILE REFERENCE: 10466-14

CURRENT APPLICATION NUMBER: US/09/907,794A

CURRENT APPLICATION NUMBER: US/09/907,794A

CURRENT FILING DATE: 2000-02-22

PRIOR PILING DATE: 2000-02-22

PRIOR PELING DATE: 1999-07-07

PRIOR PELING DATE: 1999-07-07

PRIOR PELING DATE: 1999-07-26

PRIOR PELING DATE: 1999-07-28

PRIOR PELING DATE: 1999-07-38

PRIOR PELING DATE: 1999-09-08

PRIOR PELING DATE: 1999-09-08

PRIOR PELING DATE: 1999-09-13

PRIOR PELING DATE: 1999-09-13

PRIOR PELING DATE: 1999-09-13

PRIOR APPLICATION NUMBER: PCT/US99/21647

PRIOR APPLICATION NUMBER: PCT/US99/2169

PRIOR APPLICATION NUMBER: PCT/US99/2814

PRIOR APPLICATION NUMBER: PCT/US99/2814

PRIOR PELING DATE: 1999-10-05

PRIOR PELING DATE: 1999-11-29

PRIOR PELING DATE: 1999-11-20

PRIOR PELING DATE: 1999-12-02

PRIOR PELING DATE: 1999-12-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 256, Application US/09907794A Patent No. 6635468
```

```
APPLICANT: FILVANCIF, ELIEN
APPLICANT: FONG, Sherman
APPLICANT: Gacy, Sherman
APPLICANT: Gacy, Sherman
APPLICANT: Gacy, Sherman
APPLICANT: Gacy, Wei-Ciang
APPLICANT: Goddard, A.
APPLICANT: Goddard, A.
APPLICANT: Goddard, P.
APPLICANT: Gimald, Christopher J.
APPLICANT: Gimald, Christopher J.
APPLICANT: Milan, Kenneth, J.
APPLICANT: Milan, Kenneth, J.
APPLICANT: Milan, Memes
APPLICANT: Milan, Sewar, Timothy A.
APPLICANT: Pan, James
APPLICANT: Names
APPLICANT: Names
APPLICANT: Names
APPLICANT: Applicant: Names
APP
                                                                                                                                                                                                                          TCTIGITIGGIAATAAACACATICCAGTIGAIGCCTIGCAGGGCATTITICAAAAAAA 1080
                                                                                                                                                                                                                                                                                                                           AGCCTACCTGAGCCCATGCAGCCTGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1020
                                                                                                                                   CTCCTGGCCACTACTCTTTTTCCCTCTTCTCTGGGCTCTCCCCACTCCTGGGGCCGGTCTG 963
                         900
                                                CICCIGGCCGCTACTCTTTTCCCCTCTTCTCGGCTCTCCCACTCCTGGGGCCGGTCTG 960
                         Sequence 256, Application US/09905125A; Patent No. 6664376; GENERAL INFORMATION:
APPLICANT: Genentech, Inc.; APPLICANT: Botstein, David; APPLICANT: Besnoyers, Luc; APPLICANT: Eaton, Dan L.; APPLICANT: Faton, Dan L.; APPLICANT: Fivaroff, Elen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ferrara, Napoleone
Filvaroff, Ellen
Fong, Sherman
Gao, Wel-Clang
Gerber, Hanspeter
Gerritsen, Mary E.
Goddard, A.
Godowski, Paul J.
                                                                                                                                                                                                                                                                                                                                                                             AAAAAAAAAAAAA 1097
                                                                                                                                                                                                                                                                                                                                                                                                                           AAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-905-125A-256
                                                                    844
                                                                                                                                                                                                   961
                                                                                                                                                                                                                                                                                                                                                                               1081
                                                                                                                                                                                                                                                                                          1021
                                                                                                                                                                                                                                                                                                                                    1024
                                                                                                                                                                                                                                                                                                                                                                                                                           1084
                           841
                                                                                                              106
                                                                                                                                                       904
                                                                                                                                                                                                                                               964
                                                                                                  જે
                                                                                                                                              g
                                                                                                                                                                                              8 8 8
                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                       g
                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGTGAGCTGGGGAGTGGGCTGTGGTCGGCCCAATCGGCCCGGTGTCTACACAATATCAG 840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGTGAGCTGGGGAGTGGGCTGTGGGCCCCAATCGGCCCGGTGTCTACACCAATATCAG 843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTACACCCGTTACTTCGTATCGAATATCTTGAGCCCTCGCTACCTGGGGAATTCACC 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTGACC 423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGACATCTTTGGAGACATGGTTTGTGCTGGCAACGCCCAAGGCGGGAAGGATGCCTGCTT 723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGGTATCAGATTGGAGT 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCTTCGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCGTTATCAGGACCATGCGGCCG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   64 GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGCCGCTTATCAGGACCATGCGGCCG 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121 ACGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCCGAACTCGGGCGTTGGCCGTG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181 GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGGGCACTCACGGCGCCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           244 CTGGGCACTCACGCGGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GIGGAIGGICCAGITIGGCCAGCIGACITCCAIGCCAICCITCIGGAGCCIGCAGGCCIA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCÄGCC 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTATGACATTGCCTTGGTGAAGCTGTCTGCAGCCCTGTCACTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCCACACCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGAATGGACTGTGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                          Score 1090.6; DB 4; Length 1100;
Pred. No. 2.7e-292;
0; Mismatches 4; Indels 0;
99.1%;
                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 99.6
Matches 1093; Conservative
                                                                                                                                                                                                                            ; TYPE: DNA
; ORGANISM: Homo Sapien
US-09-907-794A-256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
```

g

셤

ઠે

셤

ઠ

ద

ઠે

요

ò

g

ઠે

유 ઠ 원 Š

ठ

g

g ઠે 셤 ઠે 요 ઠે 요 ò a

ઠે

960

903

840

843

723 780

```
664 GGACATCTTTGGAGACATGGTTTGTGCTGGCAACGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                           CGTGAGCTGGGGAGTGGCTCTGTCGCCCCAATCGGCCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                  964 AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTG
                                                                                       CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGAATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                           CCACCACTTTGAGTGGATCCAGAAGCTGATGGCCCAGAGTGGCATGTCCCAGGCCAGACCC
                                                                                                                                                                                                                            CCACCACTTTGAGTGGATCCAGAAGCTGATGGCCCAGAGTGGCATGGCCAGACCC
                                                                                                                                                                                                                                                                             CTCCTGGCCGCTACTCTTTTTCCCTCTTCTCTGGGCTCTCCCCACTCCTGGGGGCCGGTCTG
                                                                                                                                                                                                                                                                                                  CTCCTGGCCACTACTCTTTTTCCCTCTTCTCTGGGCTCTCCCCACTCCTGGGGCCGGTCTG
                                                                                                                                                                                                                                                                                                                                               AGCCTACCTGAGCCCATGCAGCCTGGGGCCAAGTCAGGCCCTGGTTCTCTTTCTG
                                                                     CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                       CGTGAGCTGGGGAGTGGGCTGTGGTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       and Transmembrane Polypeptides and Nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Transmembran
TITLE OF INVENTION: Acids Encoding the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/902,775A CURRENT FILING DATE: 2001-07-10 PRIOR PLILNG DATE: 2000-02-22 PRIOR APPLICATION NUMBER: PCT/US00/04414 PRIOR FILING DATE: 2000-02-22 PRIOR APPLICATION NUMBER: US 60/143,048 PRIOR FILING DATE: 1999-07-07 PRIOR PLILNG DATE: US 60/145,698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Godowski, Paul J.
Grimaldi, Christopher J.
Grimaldi, Christopher J.
Hillan, Kenneth, J.
Kljavin, Ivar J.
Mather, Jennie P.
Pan, James
Paoni, Nicholas F.
Roy, Margaret Ann
Stewart, Timothy A.
Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-902-775A-256
; Sequence 256, Application US/09902775A
; Patent No. 6686451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1081 AAAAAAAAAAAAA 1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1084 AAAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ferrara, Napoleone
Filvaroff, Ellen
Fong, Sherman
Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gerber, Hanspeter
Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
APPLICANT: Genentech, Inc.; APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
APPLICANT: Besnoyers, Inc.; APPLICANT: Eaton, Dan L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Goddard, A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                         784
                                                                                                                                                                                                                                           844
                                                                                                                                                                                                                                                                           106
                                                                                                                                                                                                                                                                                                             904
                                                                                                                                                                                                                                                                                                                                                                                                                  1021
   661
                                                                   721
                                                                                                     724
                                                                                                                                       781
                                                                                                                                                                                                           841
                                                                                                                                                                                                                                                                                                                                               961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT
                              유
                                                                   8 8
                                                                                                                            8
                                                                                                                                                                셤
                                                                                                                                                                                                       à
                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          184 GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGGAGTGAGCCTGCTGCTCAGCCACCG 243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGGCACTCACGGCGCGCCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC 423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGCCGCTTATCAGGACCATGCGGCCG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC 483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        64 GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCCTTATCAGGACCTTGCGGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121 ACGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCGAACTCGGGCGTTGGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCAGGGGAGCCTGCGCCTGTGGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTACACCCGTTACTTCGTATCGAATATCTGAGCCCTCGCTACCTGGGGAATTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGAGAACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                               99.1%; Score 1090.6; DB 4; Length 1100; 99.6%; Pred. No. 2.7e-292; tive 0; Mismatches 4; Indels 0;
          PRIOR PILING DATE: 1999-10-05
PRIOR APPLICATION NUMBER: PCT/US99/28214
PRIOR APPLICATION NUMBER: PCT/US99/28214
PRIOR PELING DATE: 1999-11-29
PRIOR PELING DATE: 1999-12-02
PRIOR APPLICATION NUMBER: PCT/US99/28564
PRIOR PILING DATE: 1999-12-02
PRIOR PILING DATE: 1999-12-02
PRIOR PILING DATE: 1999-12-02
PRIOR PELING DATE: 1999-12-02
PRIOR PELING DATE: 1999-12-04
PRIOR PILING DATE: 1999-12-06
PRIOR PELING DATE: 1999-12-06
PRIOR PELING DATE: 1999-12-06
PRIOR PELING DATE: 1999-12-06
PRIOR PELING DATE: 1999-12-07
PRIOR APPLICATION NUMBER: PCT/US99/30999
PRIOR PILING DATE: 1999-12-20
PRIOR APPLICATION NUMBER: PCT/US99/30999
PRIOR PILING DATE: 1999-12-20
PRIOR APPLICATION NUMBER: PCT/US09/30999
PRIOR APPLICATION NUMBER: PCT/US09/30999
PRIOR PILING DATE: 2000-01-05
APPLICATION NUMBER: PCT/US99/23089
                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 99.6
Matches 1093; Conservative
                                                                                                                                                                                                                                                                                                                                                         ; TYPE: DNA
; ORGANISM: Homo Sapien
US-09-905-125A-256
                                                                                                                                                                                                                                                                                                                           SEQ ID NO 256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
```

ť

723

783

843 900 960 963

903

```
1024 TCTTGTTTGGTAATAAACACATTCCAGTTGATGCCTTGCAGGGCATTCTTCAAAAAAA 1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       961 AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1020
                                                                                                                                             CGTGAGCTGGGGAGTGGGCTGTGGGTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTCCTGGCCACTACTCTTTTTCCCTCTTCTCTGGGCTCTCCCACTCCTGGGGCCGGTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGCCTACCTGAGCCCATGCAGCCTGGGCCCCAACTCAGCCCAAGTCAGGCCCTGGTTCTCTTCTG
                                                                                       CGTGAGCTGGGGGTGTGGTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCACCACTTTGAGTGGATCCAGAAGCTGATGCCCCAGAGTGGCATGTCCCAGGCCAGACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTCCTGGCCGCTACTCTTTTCCCTCTTCTCTGGGCTCTCCCACTCCTGGGGCCGGTCTG
                                                                                                                                                                                                                                                                                GGACATCTTTGGAGACATGGTTTGTGCTGGCAACGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ferrara, Napoleone
Filvaroff, Ellen
Fong, Sherman
Gao, Wei-Qiang
Gerber, Hanspeter
Gerritsen, Mary E.
Goddard, Paul J.
Grimaldi, Christopher J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 256, Application US/09906700 Patent No. 6723535 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAAAAAAAAAAAAA 1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1084 AAAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Paoni, Nicholas F.
Roy, Margaret Ann
Stewart, Timothy A.
Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gurney, Austin L.
Hillan, Kenneth, J.
Kljavin, Ivar J.
Mather, Jennie P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Williams, P. Mickey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Genentech, Inc.
APPLICANT: Ashkenari, Avi
APPLICANT: Botsein, David
APPLICANT: Baton, Dan L.
APPLICANT: Eaton, Dan L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-906-700-256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                               601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1081
                                                                                                                                                                                             604
                                                                                                                                                                                                                                                                                664
                                                                                                                                                                                                                                                                                                                                                                                                                                                              784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   964
                                                                                                                                                                                                                                         661
                                                                                                                                                                                                                                                                                                                               721
                                                                                                                                                                                                                                                                                                                                                                        724
                                                                                                                                                                                                                                                                                                                                                                                                                  781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
APPLICANT:
APPLICANT:
                                                                                          g
                                                                                                                                               ઠે
                                                                                                                                                                                    g
                                                                                                                                                                                                                       ઢ
                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                      중
음
중
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GECTEGACTCAGGAAGCCGGAGTCGCAGGAGCCGCGCTTATCAGGACCATGCGGCCG 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121 ACGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCCGAACTCGGGCGTTGGCCGTG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241 CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           364 CTACACCGGTTACTTCGTATCGAATATCTATCTGAGGCCCTCGCTACCTGGGGAATTCACC 423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTAAACACATCCAGCC 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC 483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4 CGCGGGAGAGGCCATGGGCGCGCGCGCGCGCTGCTGCTGCTGCTGCTGCTCGCTGGCTCG 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        184 GCAGGGGAGCCTGCGCCTGTGGGATTCCCCACGTATGCGGAGTGAGCCTGCTCACCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 CGCGGGAGAGAGGCCATGGGCGCGCGCGGGGCGCTGCTGCTGCTGCTGCTGCTGGTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 4; Length 1100;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 1090.6; DB 4;
Pred. No. 2.7e-292;
0; Mismatches 4;
PRIOR FILING DATE: 1999-07-20
PRIOR APPLICATION NUMBER: US 60/146,222
PRIOR PILING DATE: 1999-07-28
PRIOR PLING DATE: 1999-09-08
PRIOR PLING DATE: 1999-09-08
PRIOR FLING DATE: 1999-09-13
PRIOR PLING DATE: 1999-09-13
PRIOR PLING DATE: 1999-09-13
PRIOR PLING DATE: 1999-09-15
PRIOR PLING DATE: 1999-11-29
PRIOR PLING DATE: 1999-11-30
PRIOR PLING DATE: 1999-12-02
PRIOR PLING DATE: 1999-12-20
PRIOR PLING DATE: 1999-12-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 99.6%;
Matches 1093; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
CORGANISM: Homo Sapien
US-09-902-775A-256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 124
```

윱

ઠે 셤 ò ద ò 셤

a

ઠે

8 ò

ò

셤

ઠે

```
AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    483
                                                                                                                                                                                                                                                                                                                        900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTCCTGGCCGCTACTCTTTTTCCCTCTTGGGGCTCCTCCCACTCCTGGGGCCGGTCTG 960
                                                                                                                                                                                                                                                          CATCTGTCCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG 543
                                                                                                                                                                                                                                                                                                                                                                   603
                                                                                                                                                                                                                                                                                                                                                                                                                                                        663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               304 GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCTTA 363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTACACCCGTTACTTCGTATCGAATATCTGAGCCCTCGCTACCTGGGGAATTCACC
                                                                                                                                                                   CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                 CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACCACCCCCCAGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              724 CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGAATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                               GGTCGCCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGACATCTTTGGAGACATGGTTTGTGCTGGCAACGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGTGAGCTGGGGAGTGGGTGGTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGGTGACTCAGGTGGACCCTTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 256, Application US/09903603A
Patent No. 6767995
GENERAL INPORMATION:
APPLICANT: Genentech, Inc.
APPLICANT: Botstein, David
APPLICANT: Betstein, David
APPLICANT: Betstein, David
APPLICANT: Betstein, David
APPLICANT: Ferrara, Napoleone
APPLICANT: Ferrara, Napoleone
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1084 AAAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Fong, Sherman
Gao, Wei-Qiang
Gerber, Hanspeter
Gerritsen, Mary E.
Goddard, A.
Godowski, Paul J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-903-603A-256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1081
                                                                                                                                                                                     424
                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                            484
                                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                                                                   544
                                                                                                                                                                                                                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                                                                                                                                                                                                        604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             961
                                                       361
                                                                                                                                         421
                                                                                                                                                                         셤
                                                                                                                                                                                                                                 8 8
                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
a
                                                                                  셤
                                                                                                                            à
                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGGGCACTCACGGCGGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GIGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGCGGCGCCCGTTATCAGGACCATGCGGCCG 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121 ACGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCCGAACTCGGGCGTTGGCCGTG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCTCCGG 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          63
APPLICANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: 10466-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4; Length 1100;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 1090.6; DB 4
Pred. No. 2.7e-292;
0; Mismatches 4;
                                                                              FILE REFERENCE: 10466-14

CURRENT FILING DATE: 2000-09-18

PRIOR APPLICATION NUMBER: US/09/906,700

CURRENT FILING DATE: 2000-02-22

PRIOR FILING DATE: 1999-07-26

PRIOR PLING DATE: 1999-07-28

PRIOR PLING DATE: 1999-07-28

PRIOR PLING DATE: 1999-09-08

PRIOR PLING DATE: 1999-09-08

PRIOR PLING DATE: 1999-09-08

PRIOR PLING DATE: 1999-09-13

PRIOR PLING DATE: 1999-09-13

PRIOR PLING DATE: 1999-09-13

PRIOR PLING DATE: 1999-09-15

PRIOR PLING DATE: 1999-09-15

PRIOR PLING DATE: 1999-09-15

PRIOR PLING DATE: 1999-09-15

PRIOR PLING DATE: 1999-10-05

PRIOR PLING DATE: 1999-10-05

PRIOR PLING DATE: 1999-10-05

PRIOR PLING DATE: 1999-11-29

PRIOR PLING DATE: 1999-12-02

PRIOR PLING DATE: 1999-12-03

PRIOR PLING DATE: 1999-12-02

PRIOR PLING DATE: 1999-12-02

PRIOR PLING DATE: 1999-12-03

PRIOR PRIOR PLING DATE: 1999-12-03

PRIOR PRIOR PLING DATE: 1999-12-03

PRIOR PRIO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 99.6
Matches 1093; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
CORGANISM: Homo Sapien
US-09-906-700-256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
```

요 ò 셤 ò

셤 8 ద ò 셤 8

483 540 543

```
AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGCCTACCTGAGCCCCATGCAGCCCTGGGGCCCAAGTCAGGCCCTGGTTCTCTTCTG 1023
                   243
                                                                                                                                                                                                                                  420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CICCIGGCCGCTACICITITICCCTCTICICIGGCCTCTCCCACTCCTGGGCCCCGGTCTG 960
                                                                                        CTGGGCACTCACGGCGGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGACCTTAGTGATCCCTCCGG 303
                                                                                                                                                                     GIGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA 363
184 GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTACCACCG
                                                                                                                                                                                                                                                                                                                                                                                                   CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGTGAGCTGGGGAGTGGGGCTGTGGTCGGCCCGGTGTCTACACCAATATCAG
                                                                                                                                               GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA
                                                                                                                                                                                                                                CTACACCCGTTACTTCGTATCGAATATCTGAGCCCTCGCTACCTGGGGAATTCACC
                                                                                                                                                                                                                                                      CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCCACACCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGACATCTTTGGAGACATGGTTTGTGCTGGCAACGCCCAAGGCGGGAAGGATGCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGTGAGCTGGGGAGTGGGCTGTGGTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCACCACTTTGAGTGGATCCAGAAGCTGATGGCCCAGAGTGGCCATGTCCCAGACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            crecresceactaeterrireceretreressereteeseerere
                                                           CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG
                                                                                                                                                                                                                                                                                                                    CTATGACATTGCCTTGGTGAAGCTGTCTGCACTGTCTACACTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                             carcretrecedescreeaerrreaerrreaeaecedeaeaeaerecreereaere
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGGTGACTCAGGTGGACCCTTGTGCACAAGGATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-904-920A-256
; Sequence 256, Application US/09904920A
; Patent No. 6806352
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAAAAAAAAAAAAA 1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1081
                                                                                                     244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1084
                                                           241
                                                                                                                                               301
                                                                                                                                                                                         304
                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                          364
                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                            424
                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                               484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  964
                                                         ઠે
                                                                                          셤
                                                                                                                                             ò
                                                                                                                                                                       유
                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                      APPLICANT: Mather, Journa J.
APPLICANT: Mather, Journa J.
APPLICANT: Mather, Journa J.
APPLICANT: Paoni, Micholas F.
APPLICANT: Paoni, Micholas F.
APPLICANT: Paoni, Micholas F.
APPLICANT: Paoni, Micholas F.
APPLICANT: Tumas, Daniel
APPLICANT: Tumas, Daniel
APPLICANT: Tumas, Daniel
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
CURRENT APPLICANTON NUMBER: US/09/903,603A
PRIOR APPLICANTON NUMBER: US/09/903,603A
PRIOR APPLICANTON NUMBER: PCT/0800/0414
PRIOR APPLICANTON NUMBER: PCT/0800/0414
PRIOR APPLICANTON NUMBER: PCT/089/2034
PRIOR APPLICANTON NUMBER: US/09/903,603B
PRIOR APPLICANTON NUMBER: US/09/903,603B
PRIOR APPLICANTON NUMBER: PCT/089/2034
PRIOR APPLICANTON NUMBER: PCT/089/2034
PRIOR APPLICANTON NUMBER: PCT/089/2034
PRIOR PLINEN DATE: 1999-09-13
PRIOR PLINEN DATE: 1999-09-13
PRIOR APPLICANTON NUMBER: PCT/0899/2031
PRIOR PLINEN DATE: 1999-10-36
PRIOR APPLICANTON NUMBER: PCT/0899/2031
PRIOR PLINEN DATE: 1999-11-09
PRIOR APPLICANTON NUMBER: PCT/0899/2031
PRIOR PLINEN DATE: 1999-12-02
PRIOR PRINGN APPLICANTON NUMBER: PCT/0899/2031
PRIOR PLINEN DATE: 1999-12-02
PRIOR PRINGN APPLICANTON NUMBER: PCT/0899/2039
PRIOR PRINGN APPLICANTON NUMBER: PCT/0899/2039
PRIOR PLINEN DATE: 1999-12-05
PRIOR PRINGN APPLICANTON NUMBER: PCT/0899/3099
PRIOR PLINEN DATE: 1999-12-05
PRIOR PLINEND DA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           64 GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGCCGGCGCCCGTTATCAGGACCATGGCCG 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121 ACGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCGAACTCGGGCGTTGGCCGTG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 CGCGGGAGAGAGGCCATGGGCGCGCGCGGGGCGCTGCTGCTGCTGCTGCTGCTGGTCGCTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 1090.6; DB 4; Length 1100;
Pred. No. 2.7e-292;
0; Mismatches 4; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 99.6%;
Matches 1093; Conservative 0
               Kljavin, Ivar J.
Mather, Jennie P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
CRGANISM: Homo Sapien
US-09-903-603A-256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO 256
```

783

903

셤 ઠે 셤 ò us-10-040-647-5.rni

```
1021 TCTTGTTTGGTAATAAACACATTCCAGTTGATGCCTTGCAGGGCATTTTTCAAAAAAA 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             961 AGCCTACCTGAGCCCATGCAGCCTGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTG 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                    183
                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                             GEGGATGGECCAGTTTGGCCAGGTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    904 CTCCTGGCCACTACTCTTTTTCCCTCTTCTCTGGGCTCTCCCCACTCCTGGGGCCGGTCTG 963
                                                                                                                                                                                                                                                                                                                                            CTGGGCACTCACGCCGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                       480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           900
                                                63
                                GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCG
                                                                                                                                                                          ACGGGTCATCACGTCGCGCATCGTGGATGGAGGACGCCGAACTCGGGCGTTGGCCGTG
                                                                                                                                                                                                184 GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTGCTCCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTACACCCGTTACTTCGTATCGAATATCTGAGCCCTCGCTACCTGGGGAATTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61 GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCG
                                                                                                                                                                                                                                                           GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                                                                                                                                                                                                                                                    244 CTGGGCACTCACGCGGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGACCTTAGTGATCCCTCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             544 CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACCCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  781 CGTGAGCTGGGGAGGGCTGTGGTCGGCCCAATCGGCCCGGTGTCTACACGATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                784 CGTGAGCTGGGGAGTGGGCTGTGGTCGGCCCCATCGGCCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              901 CTCCTGGCCGCTACTCTTTTTCCCTCTTCTGGGGTCTCTCCCACTCCTGGGGCCGGTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       964 AGCCTACCTGAGCCCATGCAGCCTGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       364 cracaccostractrostarcaaararcrarcraaccorcocracoraccaaarroacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                604 GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACACCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                664 GGACATCTTTGGAGACATGGTTTGTGCTGGCAACGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGGTGACTCAGGTGGACCCTTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1081 AAAAAAAAAAAAAA 1097
                                                                                                                                                                                                                                                             181
                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         661
                                                                                                                                64
                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          721
                                                                                                                                                             ò
                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                       8 8
                                                                                                                                                                                                                                                                                                                                                                          음 장
                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                       ò
                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                MARILLOWIT SERONT DBIN LAND AND ADDITIONAL PRESENCE TO THE MEDICANT SECOND ADDITIONAL MARILLOWIT SECOND ADDITIONAL MARILLOWIT SECOND ADDITIONAL MARILLOWIT SECOND ADDITIONAL SECOND ADDITIONAL SECOND ADDITIONAL SECONDARY ABELIA DITIONAL MARILLOWIT SECONDARY ABELIA DITIONAL MARILLOWIT SECONDARY ABELIAN MARY E APPLICANT SIGNAL MARILLOWIT SECONDARY ABELIAN TO SECONDARY MARINE DITIONAL MARILLOWIT SECONDARY ABELIAN TO SECONDARY MARINE DITIONAL SECONDARY AMERICANT SECONDARY ABELIAN TO SECONDARY AMERICAN TO SECONDARY AMERICANT SECONDARY AMERICAN TO SECONDARY AMERICANT SECONDARY AMERICANT SECONDARY AMERICANT TO SECONDARY AMERICANT SECONDARY SE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99.1%; Score 1090.6; DB 4; Length 1100; 99.6%; Pred. No. 2.7e-292; ive 0; Mismatches 4; Indels 0;
Botstein, David
Desnoyers, Iuc
Baton, Dan L.
Ferrara, Napoleone
Filvaroff, Ellen
Fong, Sherman
Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 99.6
Matches 1093; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
CORGANISM: Homo Sapien
US-09-904-920A-256
```

```
1084
                                                                                                          APPLICANT:
APPLICANT:
APPLICANT:
                                                                                APPLICANT:
                                                                                          APPLICANT:
                                                                                                  APPLICANT:
                                                                                                                                       APPLICANT
                                                                                                                                                APPLICANT
셤
```

```
4
                                                                                                                                                                                                                                                     64
                                                                                                                                                                                                                                                                                                                                                                       184
                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                               244
                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    901
                                                                                                                                                                                       g
                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                  원
                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8 6 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         성. 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Kljavin, Ivar J.
APPLICANT: Mather, Jennie P.
APPLICANT: Mather, Jennie P.
APPLICANT: Pan, James
APPLICANT: Pan, James
APPLICANT: Roy, Margaret Ann
APPLICANT: Stewart, Timothy A.
APPLICANT: Williams, P. Mickey
APPLICANT: Williams, P. Mickey
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: 10466-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/09/909,064
CURRENT FILING.DATE: 2001-07-18
PRIOR PLILING DATE: 2000-02-2
PRIOR PLILING DATE: 2000-02-2
PRIOR PLILING DATE: 1999-07-07
PRIOR PLILING DATE: 1999-07-26
PRIOR PLILING DATE: 1999-07-26
PRIOR PLILING DATE: 1999-07-26
PRIOR PLILING DATE: 1999-07-28
PRIOR PLILING DATE: 1999-07-28
PRIOR PLILING DATE: 1999-07-8
PRIOR PLILING DATE: 1999-09-08
PRIOR PLILING DATE: 1999-09-08
PRIOR PLILING DATE: 1999-09-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DR FILING DATE: 1999-09-08

APPLICATION NUMBER: PCT/US99/20944

DR APPLICATION NUMBER: PCT/US99/21090

R PILING DATE: 1999-09-15

R PILING DATE: 1999-09-15

PREJICATION NUMBER: PCT/US99/21547

PRILING DATE: 1999-09-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: PCT/US99/23089
FILING DATE: 1999-110-05
APPLICATION NUMBER: PCT/US99/28214
FILING DATE: 1999-11-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR FILING DATE: 1999-12-02
PRIOR APPLICATION NUMBER: PCT/US99/30095
PRIOR FILING DATE: 1999-12-16
PRIOR APPLICATION NUMBER: PCT/US99/30911
PRIOR FILING DATE: 1999-12-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: PCT/US99/30999
PLING DATE: 1999-12-20
APPLICATION NUMBER: PCT/US00/00219
FILING DATE: 2000-01-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: PCT/US99/28313
FILING DATE: 1999-11-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: PCT/US99/28564
FILING DATE: 1999-12-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: PCT/US99/28565
                                                                       US-09-909-064-256

i Sequence 256, Application US/09909064

j Patent No. 6818449

i GENERAL INFORMATION:

APPLICANT: Genentech, Inc.
                                                                                                                                                                                                                                                                                            Goddard, A.
Godowski, Paul J.
Grimaldi, Christopher J.
: Genentech, Inc.
: Ashkenazi, Avi
: Botstein, David
: Desnoyers, Luc
Eaton, Dan L.
Ferrara, Napoleone
: Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                      Hillan, Kenneth, J
                                                                                                                                                                                                                                    Fong, Sherman
Gao, Wei-Qiang
Gerber, Hanspeter
                                                                                                                                                                                                                                                                               Gerritsen, Mary E
                                                                                                                                                                                                                                                                                                                                       Gurney, Austin L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LING DATE: 1999-12-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                                                                                                                 123
                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                               183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTCCTGGCCGCTACTCTTTTTCCCTCTTCTCGGCCTCTCCCACTCCTGGGGCCGGTCTG 960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGAATGGACTGTGGTATCAGATTGGAGT 783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            63
                                                                                                                                                                                                                                                                                                         GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGCGCCGTTATCAGGACCATGCGGCCG
                                                                                                                                                                                                                                                                                                                              GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGCGGCGCCGTTATCAGGACCATGCGGCCG
                                                                                                                                                                                                                                                                                                                                                                                                              GCAGGGGAGCCTGCGCCTGTGGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGTGAGCTGGGGAGTGGGGCTGTGGTCGTCCAATCGGCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGGAATTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTACACCCGTTACTTCGTATCGAATATCTGAGCCCTCGCTACCTGGGAATTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGTGAGCTGGGGAGTGGGCTGTGGCCCCAATCGGCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCACCACTITGAGTGGATCCAGAAGCTGATGGCCCAGAGTGGCATGTCCCAGGCCAGACCC
                                                                                                                                                                                                                        ACGGGTCATCACGTCGCGCATCGTGGAGGACGCCGAACTCGGGCGTTGGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGGGGGTACATCAAGAGGGATGAGGCACTGCCATCTCCCCACACCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                    Gaps
                                                                                                                                          Score 1090.6; DB 4; Length 1100;
Pred. No. 2.7e-292;
0; Mismatches 4; Indels 0;
                                                                                                                                          Query Match
Best Local Similarity 99.6%; Pre
Matches 1093; Conservative 0;
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 256
; LENGTH: 1100
; TYPE: DNA
; ORGANIEM: Homo Sapien
US-09-909-064-256
```

```
120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121 ACGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCGAACTCGGGCGTTGGCCGTG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301 GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      721 CGGTGACTCAGGTGGACCCTTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     184 GCAGGGGAGCCTGCGCCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           244 CTGGGCACTCACGCGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCTCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  304 GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           364 CTACACCCGTTACTTCGTATCGAATATCTATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 544 CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCCACCCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           64 GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    124 ACGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCGAACTCGGGCGTTGGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361 CTACACCCGTTACTTCGTATCGAATATCTTGTGTGGCCCTCGCTACCTGGGGAATTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     424 CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACATAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           484 carcretrecedescerceaearricaerricaeaaceseaeaeaeceserseerse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              664 GGACATCTTTGGAGACATGGTTTGTGCTGGCAACGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       724 CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGAATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241 CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481 CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   541 CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACCCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  661 GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 CGCGGGAGAGGCCCATGGCCCCCCGCGGGCGCTGCTGCTGCTGCTGCTGCTGCTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181 GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
99.1%; Score 1090.6; DB 4; Length 1100;
Best Local Similarity 99.6%; Pred. No. 2.7e-292;
Matches 1093; Conservative 0; Mismatches 4; Indels 0;
PRIOR FILING DATE: 1999-12-02
PRIOR APPLICATION NUMBER: PCT/US99/28565
PRIOR FILING DATE: 1999-12-02
PRIOR FILING DATE: 1999-12-05
PRIOR PILING DATE: 1999-12-16
PRIOR APPLICATION NUMBER: PCT/US99/30091
PRIOR APPLICATION NUMBER: PCT/US99/30991
PRIOR FILING DATE: 1999-12-20
PRIOR FILING DATE: 1999-12-20
PRIOR FILING DATE: 1999-12-20
PRIOR FILING DATE: 1999-12-20
PRIOR FILING DATE: 2000-01-05
NUMBER OF SEQ ID NOS: 423
SEQ ID NO 256
                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
CORGANISM: Homo Sapien
US-09-905-381A-256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ሯ
                                                                                                                                                                1021 TCTTGTTTGGTAATAAACACATTCCAGTTGATGCCTTGCAGGGCATTTTTCAAAAAAA 1080
                                                                                                                                                                                               964 AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Williams, P. Mickey
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, Williams, I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: 10466-14
CURRENT APPLICATION NUMBER: US/09/905,381A
CURRENT FILING DATE: 2000-00-22
REIOR APPLICATION NUMBER: PCT/US00/0414
PRIOR FILING DATE: 1999-07-07
PRIOR FILING DATE: 1999-07-26
REIOR APPLICATION NUMBER: US 60/145,698
REIOR APPLICATION NUMBER: PCT/US99/20594
REIOR FILING DATE: 1999-09-15
REIOR APPLICATION NUMBER: PCT/US99/20594
PRIOR FILING DATE: 1999-09-13
REIOR FILING DATE: 1999-09-13
REIOR APPLICATION NUMBER: PCT/US99/21547
PRIOR FILING DATE: 1999-09-15
REIOR APPLICATION NUMBER: PCT/US99/23089
REIOR FILING DATE: 1999-09-15
REIOR APPLICATION NUMBER: PCT/US99/23089
        904 CICCTGGCCACTACICTTTTCCCTCTTTCTCTGGGCTCTCCCACTCCTGGGGCCCGGTCTG 963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: PCT/US99/28313
PRIOR FILING DATE: 1999-11-30
PRIOR APPLICATION NUMBER: PCT/US99/28564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: PCT/US99/28214
FILING DATE: 1999-11-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 256, Application US/09905381A Patent No. 6818746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Godowski, Paul J.
Grimaldi, Christopher J.
Gurney, Austin L.
Hillan, Kenneth, J.
                                                                                                                                                                                                                                                                                                                           1084 AAAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                       1081 AAAAAAAAAAAAA 1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Roy, Margaret Ann
Stewart, Timothy A.
Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ferrara, Napoleone
Filvaroff, Ellen
Fong, Sherman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pan, James
Paoni, Nicholas F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gerber, Hanspeter
Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Kljavin, Ivar J.
Mather, Jennie P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
APPLICANT: Genetech, Inc.
APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Desnoyers, Luc
Eaton, Dan L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Goddard, A.
                                                       ò
                                                                                                            요
                                                                                                                                                     8
                                                                                                                                                                                                       임
                                                                                                                                                                                                                                                                    ò
```

63

us-10-040-647-5.rni

ò a ઠે 셤 ð

```
GIGGAIGGICCAGIIIGGCCAGCIGACIICCAIGCCAICCCIICIGGAGCCIGCAGGCCIA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61 GCTGGACTCAGGAAGCCGGAGTCGCAGGAGCCGCGCGCTTATCAGGACCATGCGGCCG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACGGGTCATCACGTCGCGCATCGTGGGTGGAGAGACGCCGAACTCGGGCGTTGGCCGTG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGGGCACTCACGCGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCTCCAGGAAGTTCA 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA 363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CHACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC 423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC 483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGGTGACTGG 543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 1090.6; DB 4;
Pred. No. 2.7e-292;
0; Mismatches 4;
PRIOR FILING DATE: 1999-09-15
PRIOR FILING DATE: 1999-09-15
PRIOR FILING DATE: 1999-09-15
PRIOR PILING DATE: 1999-09-15
PRIOR PELICATION NUMBER: PCT/US99/23089
PRIOR PELICATION NUMBER: PCT/US99/23089
PRIOR FILING DATE: 1999-11-29
PRIOR PELICATION NUMBER: PCT/US99/28214
PRIOR APPLICATION NUMBER: PCT/US99/28313
PRIOR PELICATION NUMBER: PCT/US99/28564
PRIOR PELICATION NUMBER: PCT/US99/28665
PRIOR PELICATION NUMBER: PCT/US99/30095
PRIOR PELICATION NUMBER: PCT/US99/30095
PRIOR PELICATION NUMBER: PCT/US99/30096
PRIOR PELICATION NUMBER: PCT/US99/30991
PRIOR PELICATION NUMBER: PCT/US99/30999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 99.6
Matches 1093; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             type: DNA CORGANISM: Homo Sapien US-09-906-618-256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ठ हे ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                             961 AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAGGCCCTGGTTCTCTTCTG 1020
                                                                                                                                                                                                                                                                                                                                                                                                                  TCTIGTTIGGTAATAAACACATTCCAGTIGATGCCTTGCAGGGCATTTTTCAAAAAAA 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Goddwski, Paul J.
APPLICANT: Gdowski, Paul J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Hillan, Kenneth, J.
APPLICANT: Hillan, Kenneth, J.
APPLICANT: Hillan, Kenneth, J.
APPLICANT: Roy, Margaret Ann
APPLICANT: Paoni, Nicholas F.
APPLICANT: Roy, Margaret Ann
APPLICANT: Stewart, Timcthy A.
APPLICANT: Stewart, Timcthy A.
APPLICANT: Stewart, Timcthy A.
APPLICANT: Walliams, P. Milckey
APPLICANT: Walliams, P. Milckey
APPLICANT: Walliams, P. Mickey
APPLICANT: Acids Encoding the Same
FILE OF INVENTION: Acids Encoding the Same
FILE OF INVENTION: Acids Encoding the Same
FILE OF INVENTION: Acids Encoding the Same
FILE OF INVENTION NUMBER: US 60/143,048
PRIOR FILING DATE: 1999-07-07
PRIOR FILING DATE: 1999-07-26
PRIOR FILING DATE: 1999-07-26
PRIOR FILING DATE: 1999-07-28
PRIOR PLING DATE: 1999-09-13
PRIOR FILING DATE: 1999-09-13
                                                                                                                                                                                                                                                                                                                                                               964 Adctractricadecearicadecreseceatecadecadereadecearicateriane 1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTCCTGGCCGCTACTTTTTCCCTCTTTTTCTGGGGTCTCCCACTCCTGGGGCCCGGTCTG 960
                                                                                                                                                                                                                                     904 CTCCTGGCCACTACTCTTTTTCCCTCTTCTCTGGGCTCTCCCACTCCTGGGGCCGGTCTG 963
                               Desnoyers, Luc
Eaton, Dan L.
Ferrara, Napoleone
Filvaroff, Ellen
Fong, Sherman
Gao, Wei-Qiang
Gerber, Hanspeter
Gerritsen, Mary E.
Goddard, A.
Godowski, Paul J.
                                                                                                       841
                                                                                                                                                                                                             901
                                                                                                                                                                                                                                                                                                                                                                                                                  1021
```

```
715 CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATTGGAGT
REPERENCE/DOCKET NUMBER: 11168
TELECOMMUNICATION INFORMATION:
TELEPHONE: (516) 742 4343
TELEFAX: (516) 742 4346
TELEFAX: 230 901 SANS UR
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                   Query Match 98.0%;
Best Local Similarity 99.5%;
Matches 1094; Conservative (
                                                                                                           LENGTH: 1094 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA
                                                                                                                                                                                                       ) NAME/KEY: CDS
; LOCATION: 17..955
US-09-023-942A-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                          FEATURE
                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                              961 AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1020
                                                                                                                                                                                                                                                                                                                                                                                                964 AGCCTACCTGAGCCCATGCCACTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1023
                                                                                                                                                                                                                                                                                                                                                                                                                                            1021 TCTTGTTTGGTAATAAACACATTCCAGTTGATGCCTTGCAGGGCATTTTTCAAAAAAA 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                              904 CTCCTGGCCACTACTCTTTTTCCCTCTTCTCTGGCCTCTCCCACTCCTGGGGCCGGTCTG 963
                                                               720
                                                                                              723
                                                                                                                            780
                                                                                                                                                           783
                                                                                                                                                                                          840
                                                                                                                                                                                                                       843
                                                                                                                                                                                                                                                      900
                                                                                                                                                                                                                                                                                   903
                                                                                                                                                                                                                                                                                                                  960
844 CCACCACTTTGAGTGGATCCAGAAGCTGATGGCCCCAGAGGCATGTCCCAGGCAGACCC
                                                                             664 GGACATCTTIGGAGACAIGGTTIGTGCTGGCAACGCCCAAGGCGGGAAGGAIGCTTGCTT
                                                                                                                            CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                          724 CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGAATGGACTGTGGGTATCAGATTGGAGT
                                                                                                                                                                                        CGTGAGCTGGGGAGTGGGCTGTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                      CTCCTGGCCGCTACTCTTTTTCCCTCTTCTCTGGGCTCTCCCACTCCTGGGGCCGGTCTG
                                                               GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-023-942A-3
; Sequence 3, Application US/09023942A
; Sequence 3, Application US/09023942A
; Patent No. 6479274
; GENERAL INFORMATION:
; APPLICANT: (US only) ANTALIS Toni Marie and HOOPER John David
; TITLE OF INVENTION:
; NUMBER OF SEQUENCES: 30
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SCULLY, SCOTT, MURPHY & PRESSER
; STREET: 400 GARDEN CITY PLAZA
; CITY: GARDEN CITY
; STATE: NEW YORK
; COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READBLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/023,942A
FILING DATE: 13-FEB-1998
CLASSIFICATION NUMBER: POS101/97
FILING DATE: 13-FEB-1997
FILING DATE: 13-FEB-1998
ATTORNEY/AGENT INFORMATION:
NAME: DIGIGLIO, FRANK S
REGISTRATION NUMBER: 31,346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1081 AAAAAAAAAAAAA 1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11530
                                604
                                                               661
                                                                                                                            721
                                                                                                                                                                                        781
                                                                                                                                                                                                                                                     841
                                                                                                                                                                                                                                                                                                                  901
 601
                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                              엄
                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                           셤
                                                               ò
                                                                                                                           à
                                                                                                                                                   <u>۾</u>
                                                                                                                                                                             8
```

```
120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       295 GIGGAIGGICCAGITIGGCCAGCIGACTICCAIGCCAICCTICTGGAGCCIGCAGCCTA 354
                                                                                                                                                                                                                                                                                                                                                                                                                                            121 ACGGGTCATCACGTCGCGCATCGTGGGTGGAGAGGACGACGACTCGGGCGTTGGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181 GCAGGGGAGCCTGCGCCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     355 CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC
                                                                                                                                                                                                                                                                                                   61 GGCTGGACTCAGGAGCCGGAGTCGCAGGAGCCGCGCCGTTATCAGGACCATGCGGCCG
                                                                                                                                                                                                                                                                                                                                             61 GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGCGCCGTTATCAGGACCATGCGGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121 ACGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCGAACTCGGGCGTTGGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241 CTGGGCACTCACGGCGCGCACTGCTTTGAAAC-----TGACCTTAGTGATCCCTCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361 CTACACCCGTTACTTCGTATCGAATATCTTATCTGAGCCCTCGCTACCTGGGGAATTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421 CTATGACATTGCTTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481 CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                655 GGACAFCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                     1 CGCGGGAGAGAGGCCATGGGCGCGCGCGGGGCGCTGCTGCTGGCGCTGCTGCTGGCTCG
                                                                                                                                                                                                       241 CTGGGCACTCACGGCGGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301 GIGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    475 CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541 CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCCACCCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         535 CTGGGGGTACATCAAGAGGATGAGGCACTGCCATCTCCCCACACCCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               595 GGTCGCCATCATAAACAACTCTATGTGCCACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181 GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           661 GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                Gapa
                                                                            9
       Length 1094;
                                                                        0; Indels
Score 1078; DB 4;
Pred. No. 8.3e-289;
0; Mismatches 0;
```

360

420

480

474

900

99

654

ö

120

83

300

263

420

443

```
AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTTCTG 1020
                                                                                                                                                                                   GCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGCCCCTATCAGGACCATGCGGCCC 143
                                                                                                                                                                                                                             121 ACGGGTCATCACGTCGCGCATCGTGGGTGGAGAGGACGCCGAACTCGGGCGTTGGCCGTG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTCCTGGCCGCTACTCTTTTCCCTCTTCTCTGGGCTCTCCCCACTCCTGGGGCCGGTCTG 960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  144 ACGGGTCATCACGTCGCGCATCGTGGGTGAGAGACGCCCGAACTCGGGCGTTGGCCGTG 203
                                                                                                                                                                                                                                                                                      GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG 240
                                                                                                                                                                                                                                                                                                                                                                                                          GIGGAIGGICCAGITIGGCCAGCIGACTICCAIGCCAICCTICIGGAGCCIGCAGGCCIA 360
                                                                                                                                                                                                                                                                                                                                                                                                                           CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGAATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                credecenacarcaacagagargaggacreccarcaccacacccrecacagagarrea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGTCGCCATCATAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CGTGAGCTGGGGAGTGGGCTGTCGGCCCCAATCGGCCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cecedeadadedeatedececededececececetecrecrecerecerecrecre
                                                                                                                                                                                                                                                                                                       GCAGGGGAGCCTGCCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTGCTCCACCG
                                                                                                                                                                                                                                                                                                                                                 CTGGGCACTCACGGCGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG
                                                                                                                                                                                                                                                                                                                                                                 CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGTCGCCATCATAAACAACTCTATGTGCAACCACCTTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTACACCGGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC
                                                                                                          CGCGGGAGAGGAGGCCATGGGCGCGCGCGGGGCGCTGCTGCTGCTGCTGCTGCTGGTTGCTCG
                                                                             Gaps
                                                Length 1081;
                                                                           ö
                                                                           3; Indels
                                                DB 3;
                                              Score 1051.2; DB 3
Pred. No. 2.2e-281;
0; Mismatches 3;
; SEQUENCE DESCRIPTION: SEQ ID NO: 15
US-09-008-271A-15
                                              Query Match
Best Local Similarity 99.7%;
Matches 1053; Conservative
                                                                                                                                     24
                                                                                                                                                                                              84
                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            961
                                                                                                          н
                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                    204
                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                               264
                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                         324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601
                                                                                                                                  원
                                                                                                                                                                                        요
                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ္ရ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                          ઠ
                                                                                                                                                                  ò
                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                 ઠ્ઠ
                                                                                                                                                                                                                                                                                                                                                                     ద
                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Š
                                                                                                                                                                                961 AGCCTACCTGAGCCCATGCAGCCTGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1020
                                                                                                                                                                                                                                           894
   840
                                                             900
                                                                                                                        960
                                                                                                                                      CICCIGGCCGCTACTITITICCCTCTICTTGGGCTCTCCCACTCCTGGGGCCGGTCTG 954
                              834
                  CTCCTGGCCGCTACTCTTTTCCCTCTTCTGGGCTCTCCCCACTCCTGGGGCCGGTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTE: CA COUNTRY: USA

ZIP: 94304

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Comparible
OPERATING SYSTEM: DOS
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/008,271A
FILING DATE: 16-Jan-1998
PRIOR APPLICATION DATA:
APPLICATION NUMBER: CINKNOWN>
FILING DATE: CUNKNOWN>
FILING DATE: CUNKNOWN>
FILING DATE: CUNKNOWN>
FILING DATE: CUNKNOWN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Yue, Henry
Guegler, Karl J.
Corley, Neil C.
Tang, Tom Y.
Shah, Purvi
TITLE OF INVENTION: HUMAN PROTEASE MOLECULES
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: Incyte Pharmaceuticals, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Mohan-Peterson, Sheela
REGISTRATION NUMBER: 41,201
REFERENCE/DOCKET NUMBER: PF-0458 US
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-855-0555
                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Bandman, Olga
Hillman, Jennifer L.
                                                                                                                                                                                                                                                                                                    1081 AAAAAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 15, Application US/09008271A Patent No. 6203979 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                          1075 AAAAAAAAAAAAAAAA 1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INFORMATION FOR SEQ ID NO: 15:
SEQUENCE CHARACTERISTICS:
LENGTH: 1081 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET: 3174 Porter Dr
CITY: Palo Alto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: 650-845-4166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: nucleic acid
STRANDEDNESS: singl
TOPOLOGY: linear
IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LIBRARY: PROSTUT03
CLONE: 789927
                                                                                                                                                                                                                                                                                                                                                                                            US-09-008-271A-15
                                                                                                                                                                                                             955
                                                                                                                                                   895
                                                                                                                                                                                                                                           1021
   781
                                                             841
                                                                                                                       901
                             셤
                                                                                     g
                                                                                                                     ઠે
                                                                                                                                                   셤
                                                                                                                                                                                ò
                                                                                                                                                                                                          원
                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                a
 ò
                                                            Ś
```

743

780 803 840 900

923

863

720

9

683

540 563 9 623

셤

ð

```
679 GTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTTCGGTGACTCAGGTGGACCC 738
                                                                                                                                                                                                                                                                                                                                                                                                                                             799 reregregecearcegecederereracionarianes reservados r
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         860 CAGAAGCIGAIGGCCCAGAGIGGCAIGICCCAGCCAGACCCCTCCIGGCCGCTACTCTIT 919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               859 CAGAAGCTGATGGCCCAGAGTGGCATGTCCCAGCCAGACCCTCCTGGTCTAGACATCAC 918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          920 TICCCICITCICIGGGCICICCCACICCIGGGCCGGICTGAGCCIACCIGAGCCAIG 978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                919 CATCACCATCACTAGCGGCCGCTTTCCCTTTAGTGGGTTAATGCTTCGAGCAGACATG 977
                                                                                                                                                                                                                      739 TTGGCCTGTAACAAGAATGGACTGTGGTATCAGATTGGAGTCGTGAGCTGGGGAGTGGGC
                                                                                                                 740 TIGGCCTGTAACAAGGATGGACTGTGTATCAGATTGGAGTCGTGGGGAGTGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-033-942A-25

| Sequence 25, Application US/09023942A |
| Sequence 25, Application US/09023942A |
| Patent No. 6479274 |
| GENERAL INPORMATION: |
| APPLICANT: (US only) ANTALIS Toni Marie and HOOPER John David |
| TITLE OF INVENTION: NOVEL MOLECULES |
| NUMBER OF SEQUENCES: 30 |
| CORRESPONDENCE ADDRESS: ADDRESSER |
| STREET: 400 GARDEN CITY PLAZA |
| CITY: GARDEN CITY |
| STATE: NEW YORK |
| COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               43.8%; Score 482.2; DB 4; Length 959;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:

APPLICATION NUMBER: PO5101/97
FILING DATE: 13-FEB-1997
PRIOR APPLICATION NUMBER: P0422/97
FILING DATE: 18-NOV-1997
FILING DATE: 18-NOV-1997
PRIOR APPLICATION NUMBER: International PCT Application
FILING DATE: 13-FEB-1998
ATTORNEY/AGENT INFORMATION:
NAME: D161GLIO, FRANK S
REGISTRATION NUMBER: 31,346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READBLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
COMPUTER: IBM PC COMPATIBLE
COMPUTER: IBM PC COMPATIBLE
COMPUTER: PATORILI Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/023,942A
FILING DATE: 13-FEB-1998
CLASSIPICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE/DOCKET NUMBER: 1
TELECOMMUNICATION INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPAN: (516) 742 4343
TELEPAX: (516) 742 4364
TELER: 230 901 SANS UR
INFORMATION FOR SEQ ID NO: 25:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 959 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLLGY: linear
MOLECULE TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: CDS
LOCATION: 2..856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
US-09-023-942A-25
                                                                                                                                                                                                                                                                                                                                  800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         엄
                                                                                                                 ઠ
                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
984 AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTTCGGTGACTCAGGTGGACCC 739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               199 TGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCGCTGGGCACTCACGGCGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCTATGTGCAACCACCTCTCTCAAGTACAGTTCCGCAAGGACATCTTTGGAGACATG 678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     139 Arcerresesecrariscrerada acreses estreseceres estas esta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                200 TGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCGCTGGGCACTCACGGCGGCG 259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTACTACACCCGTTACTTCGTA 379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        559 GATGAGGCACTGCCATCTCCCCACACCCTCCAGGAAGTTCAGGTCGCCATCATAAACAAC 618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAAGGACATCTTTGGAGACATG 679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGGGTGGATGGTCCAGTTTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTACAACAACCGTTACTTCGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               140 ATCGTGGGTGGAGAGGACGCCGAACTCGGGCGTTGGCCGTGGCAGGGGAGCCTGCGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  260 CACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGGGTGGATGGTCCAGTTTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          380 TCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACCCTATGACATTGCCTTGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                379 TCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACCCTATGACATTGCCTTGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 440 AAGCTGTCTGCACCTGTCACCTACACTAAACACACCCAGCCCATCTGTCTCCAGGCCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 439 AAGCIGICIGCACCIGICACCIACACIAAACACAICCAGCCCAICTGICICCAGGCCICC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACATITGAGITTGAGAACCGGACAGACTGCTGGGTGACTGGCTGGGGGGTACATCAAAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GATGAGGCACTGCCATCTCCCCACACCCTCCAGGAAGTTCAGGTCGCCATCATAAACAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OTHER INFORMATION: Description of Artificial Sequence: Nucleic acid OTHER INFORMATION: sequence of human protease F in CFEK2 zymogen OTHER INFORMATION: vector
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 1103;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              55; Indels
                                                                                                                 1021 TCTTGTTTGGTAATAACACATTCCAGTTGATGCCT 1056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 751; DB 3; L
Pred. No. 4.4e-198;
0; Mismatches 55;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Darrow, Andrew
APPLICANT: Qi, Jenson
APPLICANT: Qi, Jenson
TITLE OF INVENTION: Zymogen Activation System
FILE REFERENCE: ORT-1028
CURRENT APPLICATION NUMBER: US/09/386,642
CURRENT FILING DATE: 1999-08-31
NUMBER OF SEQ ID NOS: 60
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 59
LENGTH: 1103
TYPE: DNA
CREANTSM: Artificial Sequence
                                                                                                                                                                                                                      1044 rerrerrigeraaraaacaearrecaerrearecer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 59, Application US/09386642
Patent No. 6420157
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 93.4%;
Matches 784; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                             .09-386-642-59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      680
```

a

셤

g 8

```
APPLICANT: (US only) ANTALIS Toni Marie and HOOPER John David TITLE OF INVENTION:

NUMBER OF SEGUENCES: 30
CORRESPONDENCES: 30
CORRESPONDENCES: 30
CORRESPONDENCES: 30
CORRESPONDENCES: 30
CONDITY: GARDEN CITY PLAZA
CITY: GARDEN CITY PLAZA
CONDITY: USA
CONDITY: USA
COMPUTER REDABLE FORM:
MEDIUM TYPE: FOOPY disk
COMPUTER: IBM FO Compatible
COMPUTER: IBM FO Compatible
COMPUTER: BADABLE FORM:
MEDIUM TYPE: Patentin Release #1.0, Version #1.25
COMPUTER: BADABLE FORM:
MEDIUM TYPE: Patentin Release #1.0, Version #1.25
COMPUTER: BADABLE FORM:
MARRY APPLICATION DATA:
APPLICATION NUMBER: US/09/03,942A
FILING DATE: 13-FEB-1998
FILING DATE: 13-FEB-1998
FILING DATE: 13-FEB-1998
FILING APPLICATION NUMBER: International PCT Application
FILING APPLICATION NUMBER: 11168
FRIENCE CHARACTERISTION:
MARE: DIGITALO, FRANK S
REGISTRATION NUMBER: 31,346
REFERENCE CHARACTERISTION:
TELEPRAX: (516) 742 4346
TELEPRAX: (516) 742 4346
TELERAX: (516) 742 4366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      32.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity 97.5 Matches 357; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-023-942A-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  941 CCACTCCTGGGGCCGGTCTGAGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGT 1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               359 TACAATAACTTCATCCAGCCCATCTGCCTCCTGAACTCCACGTACAAGTTTGAGAACCGA 418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     940
                                                                                                      TTATCAGGACCATGCGGCCGACGGGTCATCACGTCGCGCATCGTGGGGTGGAGGACGCC 160
                                                                                                                                                                                                  GAACTCGGGCGTTGGCCGTGGCAGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGA 220
                                                                                                                                                                                                                                                                                                GTGAGCCTGCTCAGCCACCGCTGGGCACTCACGGCGGCGCACTTTGAAACCTATAGT 280
                                                                                                                                                                                                                                                                                                                                           128 GCAACCTTGCTCAACCGCCGCTGGGTGCTTACAGCTGCCACTGCTTCCAAA----- 179
                                                                                                                                                                                                                                                                                                                                                                                             GACCTTAGTGATCCCTCCGGGTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCC 340
                                                                                                                                                                                                                                                                                                                                                                                                                                            180 -AGGATAACGATCCTTTTGACTGGACAGTCCAGTTTGGTGAGCTGACTTCCAGGCCATCT 238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             641 CTCAAGTACAGTTTCCGCAAGGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAA 700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGCGGGAAGGATGCCTGCTTCGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGA 760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      599 GGTGGCAAGGATGCCTGCTTTGGTGACTCGGGAGGACCCTTGGCCTGCGACCAGGATACG 658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGTGGTATCAGATTGGAGTCGTGAGCTGGGGAGTGGGCTGTGGTCGGCCCCAATCGGCCC 820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     659 GTGTGGTATCAGGTTGGAGTTGTGAGCTGGGGAATAGGCTGTGGTCGCCCCCAATCGCCCT 718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    719 GGAGTCTATACCAACATCACCATCACTACAACTGGATCCAGTCAACCATGATCCGCAAT 778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                779 GGGCTGCTCAGGCCTGACCCAGTCCCCTTGCTACTGTTTCTTACTCTGGCCTGGGCTTCC 838
                                                                                                                                                                                                                                               GAGCTTGGCCGCTGGCCGTGGCAAGGGAGCCTGCGTATGGGGCAACCACTTATGTGGC 127
                                                                                                                                                  67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AACACTCTCCAGGAAGTGCAGGTAGCTATTATCAACAACAGCATGTGTAAACCATATGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8 rigicadececrecedereacadeacearecerreceraradregedeceareare
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        401 CGCTACCTGGGGAATTCACCCTATGACATTGCCTTGGTGAAGCTGTCTGCACCCTGTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TACACTAAACACATCCAGCCCATCTGTCTCCCAGGCCTCCACATTTGAGTTTGAGAACCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  521 ACAGACTGCTGGTGACTGGCTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 581 CACACCCTCCAGGAAGTTCAGGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGTGTCTACACCAATATCAGCCACCACTTTGAGTGGATCCAGAAGCTGATGGCCCAGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGCATGTCCCAGACCCCTCCTGGCCGCTACTCTTTTCCCTCTTTTCTGGGCTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              839 TCTTTGCTGAGGCCTGCCTGAGCCCACACGTGTACGTCACGTGTGG-----AGGT
                                                         18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1001 CAGGCCCTGGTTCTCTTCTGTTTGGTAATAAACACATT 1043
                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cadegrenercrirricrarcrirecrirecraaraaaccrerr 932
                           Local Similarity 71.3%; Pred. No. 1.5e-123; nee 672; Conservative 0; Mismatches 253;
                                                                                                      101
                                                                                                                                                                                                  161
                                                                                                                                                                                                                                                 68
                                                                                                                                                                                                                                                                                              221
                                                                                                                                                                                                                                                                                                                                                                                             281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 용
                                                                                                      ઠે
                                                                                                                                    g
                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                          유
                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                      용
                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
```

3455 ö 316 CAGCCAGACCCCTCCTGGCCGCTACTCTTTTTCCCTCTTCTCTGGGCTCTCCCCACTCCTG 3575 GGGCCGGTCTGAGCCTACCTGAGCCCATGCAGCCTGGGGCCCACTGCCAAGTCAGGCCCTG 1009 3576 GGGCCGGTCTGAGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTG 3635 GTTCTCTCTGTCTGTTTGGTAATAAACACACTTCCAGTTGATGCCTTGCAGGGCATTCT 3695 889 769 829 CTGGGCTCTCCCACTCCTG 949 830 ACCAATATCAGCCACCACTTTGAGTGGATCCAGAAGCTGATGGCCCAGAGTGGCATGTCC 710 GATGCCTGCTTCGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTAT 3338 GCTGCTCCCCAGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGAATGGACTGTGTAT CAGATTGGAGTCGTGGGGAGTGGGCTGTGGTCGGCCCAATCGGCCCGGTGTCTAC Gaps ö DB 4; Length 3866; Score 351.6; DB 4; Length Pred. No. 5.3e-87; O; Mismatches 9; Indels 1010 3636 장.. 음 ò

RESULT 15
US-09-021-942A-27
i Sequence 27, Application US/09023942A
j Eatent No. 6479274
; GENERAL INFORMATION:

Search completed: March 5, 2005, 09:20:35 Job time : 209.888 secs

Ada16716 Human sec Ada13145 Human sec Ada1316 Human sec Ada17360 Human sec Ada2702 Human sec Adb7782 Human sec Adc28564 Human sec Adc28564 Human sec Adc19102 Human sec Adc19102 Human sec Adc19102 Human sec Adc19103 Human sec Adc1957 Human sec Adc1953 Human sec Adc1953 Human sec Adc1953 Human sec Adc1953 Human sec Adc1965 Human sec Adc1969 Human sec

ADB74918 ADC28564 ADC39764 ADC40278 ADC19102 ADC24462 ADC28988 ADC28988

ADA17360 ADA42863 ACD23702 ADB77782

ADA42013

Human sec Human sec Human sec Human sec Human sec

```
New serine protease(s) and kinase involved in regulating cell activity and viability - particularly the testis-specific protease HELA2 used for modulation of fertility and as tumour suppressor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Serine protease; regulation; cell activity; viability; HELA2; ATC2; BCOM3; testisin; fertility; suppressor; testicular germ cell cancer; seminoma; testis-specific expression; antitumour; sperm development;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nucleotide sequence of long isoform of HELA2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
17. .961
/*tag= a
/product= "HELA2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 6; Page 62-64; 167pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (AMRA-) AMRAD OPERATIONS PTY LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98WO-AU000085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAVS9119 standard, DNA; 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97AU-00005101
97AU-00000422
                                                                                                            (first entry)
                                                    1100
                                                                                                                                                                                                                                                                              1100
                                                                                                                                                                                                                                                                                                                                                        1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Antalis TM, Hooper JD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1998-480768/41.
P-PSDB; AAW77297.
infertility, 88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13-FEB-1997;
18-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO9836054-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13-FEB-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                37-JAN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20-AUG-1998
                                                    1090.6
1090.6
1090.6
1090.6
1090.6
1090.6
                                                                                                                                                                                                                                                                                                                                                                           1090.6
1090.6
1090.6
1090.6
                                                                                                                                                                                                                                                                                                                                                      1090.6
                                                                                                                                                                                                                                             1090.6
                                                                                                                                                                                                                                                                                                 1090.6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAV59119,
                                                                                                                                                                                                                         1090.
                                                                                                                                                                                                                                                              1090.
                                                                                                                                                                                                                                                                              1090.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 1
AAVS9119
AAVS9119
XX
AC AAVS
XX
XX
DT 07-J
XX
XX
BEGIN
 Protein P
Human PRO
Human PRO
Human CDN
Novel hum
Human sec
CDNA enco
Human sec
CDNA enco
Human sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Aav59119 Nucleotid
                                                                                                                            4, 2005, 20:46:39; Search time 674.27 Seconds (without alignments) 9657.430 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                       Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Aax52259
Adc78268
Adc78268
Aca60211
Aca60211
Aca60549
Aca605549
Aca605549
Aca56019
Aca56019
Aca602016
Aca602016
Aca603146
Acd20316
Acd20316
Acd20316
Acd20316
Acd203140
Acd203140
                 GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                     Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                      4390206 segs, 2959870667 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                           nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAX52259
ADC78568
ADC78568
ACA60211
ACA60211
ACA60211
ACA60211
ACA6501
ACA6501
ACA6501
ACA5501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADA42437
ACD23340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAV59119
                                                                                                                                                                                                                                                                              IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              genesequi980s:*
genesequi990s:*
genesequ2000s:*
genesequ2001as:*
genesequ2001bs:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     geneseqn2003cs:*geneseqn2003ds:*geneseqn2004as:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               geneseqn2004bs:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             geneseqn2002as:*
geneseqn2002bs:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                geneseqn2003as:*
geneseqn2003bs:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Geneseq_16Dec04:*
                                                                                                                                                                                                                                                                                                                                                                                                              seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                    US-10-040-647-5
1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      111000
111000
111000
111000
111000
111000
111000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query
Match 1
                                                                                                                                March
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10990.6
10990.6
10990.6
10990.6
10990.6
10990.6
10990.6
10990.6
10990.6
10990.6
                                                                                                                                                                                                                                                                                Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score
                                                                                           ı
                                                                                                                                                                                                                                                                                                                                                                                                              88
                                                                                           OM nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ••
                                                                                                                                                                                                                                           Sequence:
                                                                                                                                                                                                                                                                                                                                      Searched:
                                                                                                                                                                                                                                                                                                                                                                                                              Minimum Maximum Maxim 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Database
                                                                                                                                Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Result
No.
```

ALIGNMENTS

BP.

ADC33978 ADC13048 ADC12500 ADD05055 ADD04061 ADD3637 ADE34889 ADE34889

ADC19530

```
AAAAAAAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                          1081 AAAAAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         wound healing; tissue repair; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9705-0059119P-
9708-0059121P-
9708-0059122P-
9708-0059184P-
9708-0059268P-
9708-0059266P-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97US-0062814P.
97US-0062816P.
97US-0063045P.
                                                                                                                                                                                                                                                                                                                                                                                                                                       AAX52259 standard; DNA; 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97US-0059113P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97US-0059115P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97US-0062285P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98WO-US019330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    97US-0063486P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18-SEP-1997;
18-SEP-1997;
15-OCT-1997;
17-OCT-1997;
17-OCT-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24-OCT-1997;
24-OCT-1997;
24-OCT-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO9914328-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-SEP-1997
17-SEP-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-SEP-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-SEP-1997
17-SEP-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-SEP-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .7-SEP-1997
                                                                                                                                                         841
                                                                                                                                                                                                                                                                 961
                                                                                                                                                                                                                                                                                                                                              1081
                          721
                                                  721
                                                                            781
                                                                                                      781
                                                                                                                                841
                                                                                                                                                                                    901
                                                                                                                                                                                                               901
                                                                                                                                                                                                                                      961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAX52259;
                                                                                                                                                                                                                                                                                                                                                                                                                           AAX52259
                                                                                                                                                                                                                                                                                                                                                                                                                RESULT
                                                                                                 g
                                                                                                                                8
                                                                                                                                                         g
                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                           ò
                                                                                                                                                                                8
                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                              à
                        à
      The present sequence represents the nucleotide sequence of the long isoform of HELA2. cDNA generated from HeLa cells and PAI-2 expressing HeLa cells was amplified using PCR primers AAV4812-13. Three new sequences were detected in the 480 bp amplicon. These sequences are designated HELA2 and ATC2 which have high homology to serine proteases and BCOM3 which has homology to a kinase. The proteins are involved in or associated with regulation of cell activity and/or viability.

Administration of recombinant HELA2 (also called testisin) is used to increase fertility. Downregulation of HELA2 reduces fertility. HELA2 is also a suppressor of testicular germ cell cancers (seminoma) and is also expressed in some non-testicular ancers (of colon, pancreas, prostate of one ovary), so is a marker/potential therapeutic target for cancer. The promoter from the HELA2 gene is useful for testis-specific expression of other genes, e.g. for gene therapy or modulation of fertility. Drugs that thork activity of HELA2 should have antitumour activity (other than in testis recombinant HELA2 should stop growth of tumours and normalise sperm development (eliminating the need for orchidectomy).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                540
                                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA 360
                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                                                                                                                                        CGCGGGAAAGGAGGCCATGGGCGCGCGCGCGCGCTGCTGCTGCTGCTGCTGCTGCTTGCTTGCTTGCTTGCTTGCTTGTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                              GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCCGAACTCGGGCGTTGGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGGGCACTCACGGCGCGCACTTGAAACCTATAGTGACCTTAGTGATCCTCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGGGGGTACATCAAAGAGGATGAGCACTGCCATCTCCCCACACCCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                          CGCGGGAGAGAGGCCCATGGGCGCGCGCGCGCGCTGCTGCTGGCGCTGCTGCTGGCTCG
                                                                                                                                                                                                                                                                                                                                                                                                              GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121 ACGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCCGAACTCGGGCGTTGGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCAGGGGAGCCTGCCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTGCTCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gregargerccaerrreeccaecreacrrecareccarecrregaeccrecaeecra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTACACCCGTTACTTCGTATCGAATATCTGTCTGAGCCCTCGCTACCTGGGGAATTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cracacccerractricerarceaararcrarcreaeccrreecreeceaarrcacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTATGACATTGCCTTGGTGAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                        DB 2; Length 1100;
                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                              Sequence 1100 BP; 226 A; 319 C; 313 G; 242 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                1; Indels
                                                                                                                                                                                                                                                                                                      Score 1098.4; DB Pred. No. 9e-229; 0; Mismatches 1
                                                                                                                                                                                                                                                                                                      99.06
                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 99.9
Matches 1099; Conservative
                                                                                                                                                                                                                                                      infertility
                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
В
                                                                                                                                                                                                                                                                                                                                                                                                                               ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ठे
                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              쉱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
```

```
1020
                                                                                                                                                                                                      840
                                                                                                                                                                                                                                                                         840
                                                                                                                                                                                                                                                                                                                                            900
                                                                                                                                                                                                                                                                                                                                                                                                                900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      096
661 GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTT 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Secreted protein; transmembrane protein; human; enterocolitis; Zollinger-Ellison syndrome; gastrointestinal ulceration; congenital microvilus atrophy; skin disease; cell growth; abnormal keratinocyte differentiation; psoriasis; epithelial cancer; Parkinson's disease; Alzheimer's disease; Als, neuropathy; fibromodulin; dermal scarring; Usher Syndrome; Atrophia areata; anti-thrombotic;
                                                                                                                                                                                                                                             CGTGAGCTGGGGAGTGGGTTGGGTCGGCCCAATCGGCCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGGTTCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                   CCACCACTTTGAGTGGATCCAGAAGCTGATGGCCCAGAGTGGCCATGTCCCAGGCCAGACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CICCTGGCCGCTACTCTTTTCCCTCTTCTGGGGCTCTCCCCACTCCTGGGGCCGGTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGTGAGCTGGGGAGTGGGCTGTGGTCGGCCCAATCGGCCCGGTGTCTACACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                            CCACCACTTTGAGTGGATCCAGAAGCTGATGGCCCAGAGTGGCATGTCCCAGGCCAGACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTCCTGGCCGCTACTCTTTTTCCCTCTTCTGGGCTCTCCCCACTCCTGGGGCCCGTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Protein PRO303 cDNA clone DNA42551-1217
```

(GETH) GENENTECH INC

Yuan J; Chen J, Goddard A, Pennica D, Gurney AL,

of New isolated human genes and polypeptides used in, e.g. treatment gastrointestinal ulceration.

Claim 2; Fig 91; 320pp; English,

AAX52213-74 encode secreted and transmembrane human proteins, and are obtained from cDNA libraries, prepared from fetal lung, fetal kidney, fetal liver and fetal retina. The encoded polypeptides have specific uses based on their homology to known polypeptides, e.g. PR0211 and PR0217 can be used for disorders associated with the preservation and mintenance of gastrointestinal mucosa and the repair of acute and chronic encosal lesions (e.g. enterocolitis, 2011inger-Ellison syndrome, gastrointestinal ulceration and congenital microvillus atrophy), skin diseases associated with abnormal keratinocyte differentiation (e.g. psoriasis, epithelial cancers such as lung squamous cell carcinoma of the vulva and gliomas), potent effects on cell growth and development, diseases related to growth or survival of nerve cells including PR0265 can be used as for fibromodulin, e.g. for reducing dermal scarring. PR0264 can be used as a target for anti-tumor drugs. PR0269 can be used as an anti-thrombotic agent; PR0287 polypeptides and portions may have therapeutic applications in wound healing and tissue repair; PR0317 can be used for treating problems of the kidney, uterus, endometrium, con be used for treating problems of the kidney, uterus, endometrium, con be used for treating problems of the kidney, uterus, endometrium, con be used for treating problems of the kidney, uterus, endometrium, con be used for treating problems of the kidney and genital tract

Sequence 1100 BP; 225 A; 321 C; 314 G; 240 T; 0 U; 0 Other;

Gaps Query Match
99.1%; Score 1090.6; DB 2; Length 1100;
Best Local Similarity 99.6%; Pred. No. 4.4e-227;
Matches 1093; Conservative 0; Mismatches 4; Indels 0;

1080 1083 1023 240 120 123 180 183 243 300 303 360 363 420 423 480 483 540 543 9 603 9 663 720 723 780 783 840 843 900 903 960 963 9 63 GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCGTTATCAGGACCATGCGGCCG ACGGGTCATCACGTCGTCGTGGGTGGAGGACGCCGAACTCGGGCGTTGGCCGTG GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG GCAGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCACCACCG CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG CTGGGCACTCACGGCGGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATTCCCTCCGG CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACACCAGCC GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAGTACAGTTTCCGCAA CGTGAGCTGGGGAGTGGGCTGTGGTCGGCCCATCGGCCCGGTGTCTACACCAATATCAG CTCCTGGCCACTACTCTTTTTTCCCTCTTCTCTGGGCTCTCCCCACTCCTGGGGCCGGTCTG AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 121 ACGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCCGAACTCGGGCGTTGGCCGTG CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACCCCTCCAGGAAGTTCA CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCCTCCAGGAAGTTCA GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTT GGACATCTTTGGAGACATGGTTTGTGCTGGCAACGCCCAAGGCGGGAAGGATGCCTGCTT CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT CGGTGACTCAGGTGGACCCTTGGCCTGTAACAACAATGGACTGTGGTATCAGATTGGAGT CGTGAGCTGGGGGTGTGGTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAG TCTTGTTTGGTAATAAACACATTCCAGTTGATGCCTTGCAGGGCATTTTTCAAAAAAA 841 61 124 64 181 184 241 244 301 304 364 424 481 484 541 544 601 604 661 564 721 724 781 784 844 904 964 1021 1024 361 421 901 961 요 ઠ à 셤 ઠે 쇰 ठे 셤 ò 셤 ઠે 셤 δ g ઠે 윱 ઠે В ઠે ద ઠે 셤 ઠે 셤 ò 셤 ò 셤 상 원

61 GGCTGGACTCAGGAAGCCGGAGTCGCAGAGGCGCGCCGCTTATCAGGACCATGCGGCCG

```
The invention relates to a novel nucleic acid encoding a PRO polypeptide. The polypeptides and polynucleotides of the invention may be useful as research tools and as therapeutics for treating enterocolitis, Zollinger-Blison syndrome, gastrointestinal ulceration, psoriasis, cancer, Parkinson's disease, Alzheimer's disease, ALS, neuropathies, dermal scarring and wound healing, nerve repair, thrombosis, none and/or l cartilage formation, angiogenesis, asthma, rheumatoid arthritis, multiple sclerosis, inflammatory disorders, atherosclerosis, cardiac injury, infertility, premature agging, ALDS, diabetes complications and stroke. The molecules may also be utilised during gene therapy procedures and transgenic animal production. The current sequence is that of the human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    antiinflamatory; antiulcer; cytostatic; antipsoriatic; antiparkinsonian; neutropic; neutroprotective; vasotropic; chemotaxic; angiogenic; neutroprotective; vasotropic; antiarthritic; antirheumatic; antiartexiosclerotic; cardiant; antidabetic; cerebroprotective; thrombolytic; immunomodulator; enterocolitis; Zollinger-Ellison syndrome; gastrointestinal ulceration; psoriasis; cancer; Parkinson's disease; Alzhaimer's; ALS; neuropathy; dermal scarring; wound healing; nerve repair; thrombosis; bone; cartilage formation; angiogenesis; attheumatory disorder; atherosclerosis; cardiac injury; infertility; premature aging; AlDS; diabetes; stroke; gene therapy; transgenic; PRO; human; ss; gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            transmembrane polypeptides with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Goddard A, Gurney AL, Hillan K, Pennica D, Wood WI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99.1%; Score 1090.6; DB 3; Length 1100; 99.6%; Pred. No. 4.4e-227; vative 0; Mismatches 4; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1100 BP; 225 A; 321 C; 314 G; 240 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel nucleic acids encoding secreted and transmembrane homology, e.g. to growth and cancer-associated antigens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 2; SEQ ID NO 256; 355pp; English.
                                                                                                                                                                                                                                                                  BP
                                       1081 AAAAAAAAAAAAA 1097
                                                                                                                                                                                                                                                              ADC78568 standard; cDNA; 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99WO-US021090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98WO-US019330
                                                                                                                                                                                                                                                                                                                                                                                                               01-JAN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRO CDNA of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (GETH ) GENENTECH INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2000-271434/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human PRO303 cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             P-PSDB; ADC78569.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200015796-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-MAR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Chen J,
Yuan J;
                                                                                                                                                                                RESULT 3
ADC78568
1D ADC78568
XX ADC7
XX DE Hume
XXX D
                                                          g
```

```
840
          123
                                                              183
                                                                                       240
                                                                                                                 243
                                                                                                                                         300
                                                                                                                                                                 303
                                                                                                                                                                                           360
                                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                                       423
                                                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                         483
                                                                                                                                                                                                                                                                                                                                                  540
                                                                                                                                                                                                                                                                                                                                                                           543
                                                                                                                                                                                                                                                                                                                                                                                                    900
                                                                                                                                                                                                                                                                                                                                                                                                                                                       99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           963
                                                                                                                                                                                                                     363
                                                                                                                                                                                                                                                                                                                                                                                                                              603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      843
64 GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCCTTATCAGGACCATGCGGCCC
                                                   ACGGGTCATCACGTCGCGCATCGTGGGGGGGAGGACGCCGAACTCGGGCGTTGGCCGTG
                                                                                                      GCAGGGGAGCCTGCCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCCTACCACCG
                                                                                                                                                                                                         GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA
                                                                                                                                                                                                                                                                                                                                                                  CGTGAGCTGGGGAGTGGGCTGTGGTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCACCACTTGAGTGGATCCAGAAGCTGATGGCCCAGAGTGGCTATGTCCCAGGCCAGACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121 ACGGGTCATCACGTCGCGCATCGTGGGTGGAGAGGACGCCGAACTCGGGCGTTGGCCGTG
                                                                                       GCAGGGGAGCCTGCGCCCTGTGGGGATTCCCACGTATGCGGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                         CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG
                                                                                                                                                                cresecacrescescescescrestricaaaccrarasreaccriasrearcareces
                                                                                                                                                                                           GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA
                                                                                                                                                                                                                                                                       cracacccerractricerarctaricrarctreacccrrectrectregedarricacc
                                                                                                                                                                                                                                                                                                                                                                                                                   CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCCACCCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGACATCTTTGGAGACATGGTTTGTGCTGGCAACGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      <u> AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   964 AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1021 TCTTGTTTGGTAATAAACACATTCCAGTTGATGCCTTGCAGGGCATTTTTCAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1024 TCTTGTTTGGTAATAAACACATTCCAGTTGATGCCTTGCAGGGCATTCTTCAAAAAAA
                                                                                                                                                                                                                                                                                                                          CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                    CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCCCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGTCGCCATCATAAACAACTCTATGTGCAACCCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CGGTGACTCAGGTGGACCCTTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cegraecreaegrecerregeergraacaagaarggaergregrareagarregagr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTACACCCGTTACTTCGTATCGAATATCTGAGCCCTCGCTACCTGGGGAATTCACC
                                                                                                                                                                                                                                                                                                CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGTGAGCTGGGGAGTGGGCTGTGGTCGGCCCAATCGGCCCGGTGTCTACACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1081 AAAAAAAAAAAAA 1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1084 AAAAAAAAAAAAAA 1100
                                                                                                                 184
                                                              124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      961
                                                                                       181
                                                                                                                                         241
                                                                                                                                                                 244
                                                                                                                                                                                           301
                                                                                                                                                                                                                     304
                                                                                                                                                                                                                                                                       364
                                                                                                                                                                                                                                                                                                                         424
                                                                                                                                                                                                                                                                                                                                                                           484
                                                                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                              544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    724
                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             781
                                                                                                          g
                                                                                                                                        à
                                                                                                                                                           셤
                                                                                                                                                                                   δ
                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                             Ωp
                                                                                                                                                                                                                                                                                                                       유
                                                                                                                                                                                                                                                                                                                                                                      qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                유
    셤
                                    8 8
                                                                                   ò
                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                              જ
                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
```

ö

; 0

Conservative

Similarity

Best Local Sim Matches 1093;

g ठ

9 63

CGCGGGAGAGGCCATGGGCGCGCGCGCGCCTGCTGCTGCTGCTGCTGCTCGCTCG

C; 314 G; 240 T; 0 U; 0 Other;

Seguence 1100 BP; 225 A; 321

```
Sixty one nucleic acids encoding PRO polypeptides which are useful in the treatment of skin diseases (e.g. psoriasis), cancers (e.g. lung squamous cell carcinoma) and neurodegenerative diseases (e.g. Alzheimer's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present sequence is one of sixty one nucleic acids encoding novel secreted and transmembrane PRO polypeptides. The PRO polypeptides are useful for treating skin diseases (e.g. psoriasis), cancers (e.g. lung squamous cell carcinoma), gastrointestinal disorders (e.g. lung enterocolitis), neurodegenerative diseases (e.g. Alzheimer's disease, Parkinson's disease), wound repair, cardiovascular disorders (e.g. endometrial bleeding angiogenesis, ischaemias such as coronary ischaemia, atherosclerosis), inflammatory disorders (e.g. asthma, rheumatoid arthritis, multiple sclerosis), infertility, AIDS and diabetes and retinal disorders such as retinitis pigmentosum. The PRO nucleic acids have applications in molecular biology, including use as hybridization probes, and in chromosome and gene mapping
                                                                                                                                                                                                                                                                                     Human; PRO; dermatological; antipsoriatic; cytostatic; antiinflammatory; antiparkinsonian nootropic; neuroprotective; vulnerary; cardiant; antianglogenic; vasotropic; antiaethmatic; antirheumatic; cancer; antiarthritic; antiinfertility; antidiabetic; antiviral; diabetes; ophthalmological; gene therapy; skin disease; gastrointestinal disorder; ischaemia; inflammation; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  L, Eaton DL, Ferrara N;
H, Gerritsen ME, Goddard Ä;
Hillan KJ, Kljavin IJ;
Stewart TA, Tumas D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ashkenazi AJ, Botstein D, Desnoyers L,
Filvaroff E, Fong S, Gao W, Gerber H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Filvaroff E, Fong S, Gao W, Gerber F Godowski PJ, Grimaldi CJ, Gurney AL, Mather JP, Pan J, Paoni NF, Roy MA, Williams PM, Wood WI;
                                                                ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 2; Fig 91; 393pp; English
                                                                CDNA; 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99US-0143048P.
99US-0145698P.
99US-0146222P.
99WO-US020594.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99WO-US028564.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99WO-US030095.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99WO-US021090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99WO-US021547
99WO-US023089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99WO-US028214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99WO-US028313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99WO-US030999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2000WO-US004414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000WO-US000219
                                                                                                                                                                           entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (GETH ) GENENTECH INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2001-081051/09.
P-PSDB; AAB80256.
                                                                                                                                                                           (first
                                                          AAF72417 standard;
                                                                                                                                                                                                                                   Human PRO303 cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200104311-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15-SEP-1999;
05-OCT-1999;
29-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-JAN-2000;
                                                                                                                                                                           24-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       08-SEP-1999
13-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30-NOV-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       02-DEC-1999
02-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-JAN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15-SEP-1999
                                                                                                                AAF72417;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               disease)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OHOP
RESULT 4

10 AAP772417

XXX XXX

XXX XXX XXX

XXX XXX XXX

XXX XXX XXX

XXX XXX XXX

XXX XXX XXX

XXX XXX XXX

XXX XXX XXX

XXX XXX XXX

X
```

```
AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1020
                                                        ö
                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                    180
                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     900
                                                                                                                                                                                                                                                   123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        963
                                                                                                                                                                                                                                                                                                                                                  ACGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCGAACTCGGGCGTTGGCCGTG 183
                                                                                                                                                                                                                                                                                                                                                                                                                             GCAGGGGAGCCTGCGCCTGTGGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCC 243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cresicacrecises es en contra de la contra del la contra de la contra de la contra del la c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      903
                                                                                                         9
                                                                                                                                                  63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CICCIGGCCACIACICITITITICCCICITICICITICICITICICITICICITICITICITICITICITICITICITICITICITICITICITICITICITICITICITICITICITICITICITICITICITICITICITICITICITICITICITICITICITICITICITICITICITICITICITICITICITICITICITICITICITICITICI
                                                                                                                                                                                                   GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCCACCACCACCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGTGAGCTGGGGAGTGGGTCGGTCGGTCGATCGGCCCGGTGTCTACACCAATATCAG
                                                                                                      GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCC
                                                                                                                                                                                                                                                                                                    ACGGGTCATCACGTCGCGCATCGTGGTGGAGAGGACGCCGAACTCGGGCGTTGGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                   `GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTTAGTGATCCCTCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGAGTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cresescracarcaasasasarcascacrescarcrescacacacrescasasarrea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGACATCTTTGGAGACATGGTTTGTGCTGGCAACGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cogratericadorecerridocereralecaaracaarecaerareaarredaacr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGTGAGCTGGGGAGTGGGCTGTGGGTCGGCCCAATCGGCCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTCCTGGCCGCTACTCTTTTCCCTCTTCTGGGCTCTCCCCACTCCTGGGGCCGGTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT
                                                     Gaps
       Length 1100
                                                        ö
                                                   Indels
     DB 4;
Score 1090.6; DB 4
Pred. No. 4.4e-227;
0; Mismatches 4;
     99.1%;
Query Match
Best Local Similarity 99.6
Matches 1093; Conservative
                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                   64
                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                  124
                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     904
                                                                                                                                          셤
                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                       요
                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     육 &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8 è
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ठे हे ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ठ
```

```
WPI; 2003-329602/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                P-PSDB; ABU71935.
                        24-NOV-1997;
24-NOV-1997;
24-NOV-1997;
24-NOV-1997;
24-NOV-1997;
10-SEP-1998;
14-SEP-1998;
                                                                                                                                                                                        13-SEP-1999;
15-SEP-1999;
15-SEP-1999;
05-OCT-1999;
29-NOV-1999;
01-DEC-1999;
02-DEC-1999;
TCTTGTTTGGTAATAAACACATTCCAGTTGATGCCTTGCAGGGCATTTTTCAAAAAAA 1080
                                Human; 88; gene; secreted protein; transmembrane protein; PRO; gene therapy; chromosome identification; chromosome marker.
                                                                                                                                                                                                                                                             Human cDNA for secreted/transmembrane protein PRO303
                                                                                                                                                                         ACA60211 standard; cDNA; 1100 BP
                                                                     AAAAAAAAAAAAAA 1097
                                                                                                1084 AAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                        97US-0059113P
97US-0059113P
97US-0059113P
97US-0059121P
97US-0059122P
97US-0059128P
97US-006228SP
97US-006228SP
97US-006228SP
97US-006228SP
97US-006228SP
97US-0063128P
97US-0063121P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97US-0063735P.
97US-0063738P.
97US-0064215P.
97US-0063870P.
97US-0064103P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        97US-0065186P.
97US-0065846P.
97US-0065693P.
                                                                                                                                                                                                                                                                                                                                                                                                                            11-JUL-2001; 2001US-00904011
                                                                                                                                                                                                                                12-JUN-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                     US2003003530-A1.
                                                                                                                                                                                                                                                                                                                                                                                                02-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-NOV-1997
                                                                                                                                                                                                      ACA60211;
                                                                     1081
            1021
                                                                                                                                                                                                                                                                                                                                       Ношо
                                                                                                                                          RESULT 5
ACA60211
D ACA6021

                                   d
                                                                                         g
                                                                     8
```

```
Ferrara N;
ME, Goddard A
Kljavin IJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tumas D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, E
Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen N
Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, E
Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA,
Williams PM, Wood WI;
                                                                                                                                                                                                             97US-0066511P
97US-0066770P
                         97US-0066772P
98WO-US018824
                                                                                      98WO-US025108
99WO-US020594
                                                  98WO-US019177
                                                                           98WO-US019437
                                                                                                                         99WO-US021090
                                                                                                                                                    99WO-US023089
                                                                                                                                                                 99WO-US028214
                                                                                                                                                                            99WO-US028313
99WO-US028301
                                                                                                                                                                                                      99WO-US028564
                                                                                                                                                                                                                                                                                                                                                                                                            18-SEP-2000; 2000US-00665350
                                                                                                                                                                                                                                                                                                                                                                                                                                  (GETH ) GENENTECH INC.
```

New transmembrane polypeptides and nucleic acids encoding the polypeptides, useful in gene therapy, in chromosome identification, as chromosome markers, in generating probes and in tissue typing.

Ä

Claim 2; Fig 91; 484pp; English.

The invention relates to an isolated nucleic acid with at least 80% nucleic acid sequence identity to a nucleotide sequence encoding one of a secreted/transmembrane polypeptides, or PRO polypeptides or encoding a PRO protein extracellular domain. Also included are a vector comprising the PRO protein extracellular domain. Also included are a vector comprising the PRO published PRO sulturing the host cell for the expression of the PRO polypeptide (paving at least 80% sequence identity to: (an isolated PRO polypeptide (having at least 80% sequence identity to: (c) an isolated PRO polypeptide (having at least 80% sequence identity to: (c) an imino acid sequence encoded by a nucleic and molecule deposited with an ATCC number (detailed in the specification); or (c) an extracellular domain of coid sequence encoded by a nucleic and molecule deposited with an ATCC number (detailed in the specification); or (c) an extracellular domain of peptide), a chimaeric molecule comprising a PRO polypeptide of fused to a PRO polypeptide or to a PRO polypeptide of fused to an anti-PRO antibody, detecting a herologous amino acid sequence, an anti-PRO antibody, detecting a companion of a bid sequence, an anti-PRO antibody of the protein and a bid at least one biological activity of a cell expressing a PRO245 or PRO1868 and modulating at least one biological activity of a cell expressing a PRO245 or PRO1868 and corpus PRO1868. Nucleic acids which encode PRO can be used to generate either

8888888888888888

셤

8 6 8 6

g

ક

8 4 8 4 8 8

ઠે

6 8 6

```
AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG. 1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  diagnostic; biosensor; bioreactor; Parkinson's disease;
Alzheimer's disease; inflammation; nephritis; wound healing;
nerve repair; collateral blood vessel formation; cancer; colorectal cancer; haemorinage; rhumatoin; diabetes; cirrhosis; fibrosis; restenosis; dermal fibrotic condition; keloid; scarring; ischaemia; stroke; hypertension; heart attack; atherosclerosis;
                                                                                                                    963
                                                                                               CTCCTGGCCACTACTCTTTTTCCCTCTTTTTTTTCCTTGGGGCTCTCCCACTCCCTGGGGCCCGGTCTG
                                                                                                                                                          AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG
                                                                                                                                                                                                                                  TCTTGTTTGGTAATAAACACATTCCAGTTGATGCCTTGCAGGGCATTTTTCAAAAAAA
                                       ccaccacttrgagregarccagaagcrgarggcccagagregcargreccagaccc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; secreted and transmembrane protein; PRO; pharmaceutical;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel human secreted and transmembrane protein PRO303 cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     infertility; gene therapy; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                ВР
                                                                                                                                                                                                                                                                                                                                 1081 AAAAAAAAAAAAA 1097
                                                                                                                                                                                                                                                                                                                                                                                                                                              ACD07611 standard; cDNA; 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              97US-0062816P.
97US-0063045P.
97US-0063120P.
97US-0063121P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       97US-0059121P.
97US-0059122P.
97US-0059184P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97US-0059263P.
97US-0059266P.
97US-0062125P.
97US-0062285P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        97US-0062287P.
97US-0063486P.
97US-0062814P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           97US-0063127P.
97US-0063128P.
97US-0063327P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97US-0063541P.
97US-0063542P.
97US-0063544P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   97US-0063329P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     97US-0059119P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-JUL-2001; 2001US-00907824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US2002197671-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-SEP-1997
17-SEP-1997
17-SEP-1997
17-SEP-1997
17-SEP-1997
18-SEP-1997
18-SEP-1997
18-SEP-1997
11-OCT-1997
17-OCT-1997
17-OCT-1997
17-OCT-1997
17-OCT-1997
18-OCT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    26-DEC-2002
                                                                                                                                                                                              964
                                                                                                                                                                                                                                  1021
                                                                                                                                                                                                                                                                       1024
                                                                                                                                                                                                                                                                                                                                                 1084
       841
                                           844
                                                                                 901
                                                                                                                   904
                                                                                                                                                        961
                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 6
ACD07611
                                                                               8 8
                                                                                                                                                    ઠે
                                                                                                                                                                                  셤
                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                transgenic animals or knock-out animals which may be used in the development and screening of therapeutically useful reagents. The nucleic acids may also be used in gene therapy, in chromosome identification, as chromosome markers, or in generating probes. The PRO polypeptides are useful as molecular markers for protein electrophoresis, and the isolated nucleic acids may be used for recombinantly expressing those markers. The PRO polypeptides and nucleic acids may also be used in tissue typing. Anti-PRO antibodies are useful in diagnostic assays for PRO, and in affinity purification of PRO from recombinant cell culture or natural sources. The present sequence encodes a PRO protein
                                                                                                                                                                                                                                                                                                                                                                                            GGCTGGACTCAGGAAAGCCGGAAGTCGCAGGAGCGGCCGCTTATCAGGACCATGCGGCCG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGGCACTCACGGGGGGCGCACTGCTTTGAAACCTATAGTGAACCTTAGTGATCCCTCCGG 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA 363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC 423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGAATGGACTGTGGGTATCAGATTGGAGT 783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGTGAGCTGGGGAGTGGGCTGTGGGCCCCAATCGGCCCGGTGTCTACACCAATATCAG 843
                                                                                                                                                                                                                                                                                                                                                                                                                                            GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCG 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGGGCACTCACGGCGGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTACACCCGTTACTTCGTATCGAATATCTGAGCCCTCGCTACCTGGGGAATTCACC 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA 663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGACATCTTTGGAGACATGGTTTGTGCTGGCAACGCCCAAGGCGGGAAGGATGCCTGCTT 723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGCTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT 780
                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                              63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGTGAGCTGGGGAGTGGGCTGTGGCCCCAATCGGCCCGGTGTCTACACAATATCAG
                                                                                                                                                                                                                                                                                                                                                                  cecedetadadadadacatedacececedecececenecrecrecececrecrecres
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCCACACCCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCCACCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGTCGCCATCATAAACAACTCTATGTGCAACCCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCGAACTCGGGCGTTGGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                               Query Match 99.1%; Score 1090.6; DB 8; Length 1100; Best Local Similarity 99.6%; Pred. No. 4.4e-227; Matches 1093; Conservative 0; Mismatches 4; Indels 0;
                                                                                                                                                                                                              Sequence 1100 BP; 225 A; 321 C; 314 G; 240 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                  4
                                                                                                                                                                                                                                                   Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        784
```

a

Š

6 B 6 B 6 B 6

```
970S-0063550P-
970S-006354P-
970S-0063732P-
970S-0063734P-
970S-0063734P-
970S-0063734P-
970S-0063734P-
970S-0064103P-
970S-0064103P-
970S-0064103P-
970S-0064103P-
970S-006518P-
970S-006584P-
970S-006584P-
970S-006584P-
970S-006631P-
970S-0066772P-
970S-0066772P-
970S-0066772P-
                                                                                                                                                                                                                                                  2000WO-US005004.
2000WO-US005841.
2000WO-US007377.
2000WO-US008439.
                                                                                                                                                       99WO-US025108.
99WO-US020594.
99WO-US020944.
                                                                                                                                                                                                                                        2000WO-US003565.
                                                                                                                                                                                                                              9WO-US030999
                                                                                                                                                                                        99WO-US028214
                                                                                                                                                                                              99WO-US028313
                                                                                                                                                                                                                                                                                         2000WO-US023328
                                                                                                                                                                        99WO-US021
                                                                                                                                                                             99WO-US021
```

(GETH) GENENTECH INC.

Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N; Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A; Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ; Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D; Williams PM, Wood WI;

WPI; 2003-370793/35. P-PSDB; ABO01818.

484 CATCTGTCTCCAGGCCTCCACATTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG

g

8 요

544 CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCCTCCAGGAAGTTCA

GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA

601

New genes and secreted and transmembrane polypeptides (e.g. PRO245 or PRO335), useful for treating or diagnosing e.g. Alzheimer's disease, cancers, hemorrhage, rheumatoid arthritis, diabetes, cirrhosis, ischemia or strokes.

Claim 2; Fig 91; 482pp; English

The invention describes a new isolated nucleic acid molecule comprising
the full length coding sequence of the DNA deposited with the American
CV Type Culture Collection (e.g. ATCC Deposit No. 209258), or a sequence
with at least 80% identity to a DNA encoding a PRO polypeptide comprising
cV with at least 80% identity to a DNA encoding a PRO polypeptide comprising
cV any of 61 sequences having 164-1119 amino acids fully defined in the
specification. The PRO polypeptides or polynucleotides are useful as
pharmaccuticals, diagnostics, biosensors or bioreactors. These are
cV particularly useful for detecting or treating e.g. Parkinson's disease,
Alzheimer's disease, inflammations, nephritis, wound healing, nerve
cV repair, collateral blood vessel formation, cancers (e.g. colorectal
ccancer), haemorrhage (or reduce risk for hemorrhage), rheumatoid
ccancer), haemorrhage (or reduce risk for hemocrhage), rherapeutoin in these diseases, and diagnostic determination
cof the presence of these diseases. The PRO polypeptides are also useful
ccancer (contine replacing a defective gene rhis sequence
ccancer (contine replacing a defective gene rhis sequence
ccancer (contine replacing a defective gene rhis sequence
ccancer (contine replacing and transmembrane PRO polypeptide 240 243 480 483 423 9 63 184 GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA CTATGACATTGCCTTGCTGAAGCTGTCTGCACCTGTCACCTAAACACATCCAGCC 181 GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGGAGTGAGCCTGCTCAGCCACCG 241 CTGGGCACTCACGCCGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG 301 GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC CTACACCCGTTACTTCGTATCGAATATCTGAGCCCTCGCTACCTGGGGGAATTCACC CATCTGTCTCCAGGCCTCCACATTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG CTATGACATTGCCTTGGTGAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC Gaps Query Match 99.1%; Score 1090.6; DB 8; Length 1100; Best Local Similarity 99.6%; Pred. No. 4.4e-227; Matches 1093; Conservative 0; Mismatches 4; Indels 0; Sequence 1100 BP; 225 A; 321 C; 314 G; 240 T; 0 U; 0 Other; 244 304 364 424 361 421 481 ò ò 셤 ò g g g ò g 8 g 8 ò à

σ

셤 δ g ò 셤 8 셤 8 g 8 셤 δ 셤 ò

```
Eaton DL, Ferrara N;
Gerritsen ME, Goddard A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Botstein D, Desnoyers L,
Fong S, Gao W, Gerber H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-NOV-1999; 99W0-USO28313.

02-DEC-1999; 99W0-USO28313.

02-DEC-1999; 99W0-USO28564.

02-DEC-1999; 99W0-USO28565.

16-DEC-1999; 99W0-USO30095.

20-DEC-1999; 99W0-USO30095.

20-DEC-1999; 99W0-USO30095.

11-FEB-2000; 2000W0-USO00219.

11-FEB-2000; 2000W0-USO03665.

22-FEB-2000; 2000W0-USO0366414.

24-FEB-2000; 2000W0-USO05004.

02-MAR-2000; 2000W0-USO05991.

20-MAR-2000; 2000W0-USO05991.
                                            9705 0062814P 9705 0062814P 9705 0062814P 9705 0063121P 9705 0063127P 9705 0063329P 9705 0063542P 9705 0063544P 9705 00635744P 9705 0063574P 9705 0063574P 9705 0063574P 9705 0063574P 9705 0063774P 9705 006374P 9705 006374P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9705-0063734P.
9705-0063738P.
9705-0063738P.
9705-0064215P.
9705-0064103P.
9705-0064103P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     970S-0064809P
970S-0065186P
970S-0065693P
970S-0066120P
970S-0066120P
970S-0066466P
970S-0066466P
970S-006641P
970S-006641P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98WO-US018824
98WO-US019177
98WO-US019437
98WO-US0219437
99WO-US020594
99WO-US020944
99WO-US021647
99WO-US021647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22-MAY-2000; 2000WO-USO14042.
02-UUN-2000; 2000WO-US020710.
28-UUL-2000; 2000WO-US020710.
24-AUG-2000; 2000WO-US023328.
18-SEP-2000; 2000US-00665350.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99WO-US028214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GETH ) GENENTECH INC
117-0CT-1997;
24-0CT-1997;
24-0CT-1997;
24-0CT-1997;
24-0CT-1997;
24-0CT-1997;
24-0CT-1997;
24-0CT-1997;
24-0CT-1997;
24-0CT-1997;
28-0CT-1997;
28-0CT-1997;
28-0CT-1997;
28-0CT-1997;
28-0CT-1997;
28-0CT-1997;
28-0CT-1997;
29-0CT-1997;
21-0CT-1997;
21-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21-NOV-1997;
21-NOV-1997;
24-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24-NOV-1997;
24-NOV-1997;
24-NOV-1997;
24-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10-SEP-1998;
14-SEP-1998;
16-SEP-1998;
17-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ashkenazi A,
Filvaroff E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              08-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15-SEP-1999;
15-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             05-OCT-1999;
29-NOV-1999;
    COGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGACTGTGGTATCAGATTGGAGT 780
                                                                                                                                                                                                                 CGTGAGCTGGGGAGTGGGCTGTGGCCCCAATCGGCCCGGTGTCTACACCAATATCAG 840
                                               CCACCACTTTGAGTGGATCCAGAAGCTGATGGCCCAGAGTGGCATGTCCCAGGCCAGACCC 900
                                                                                                                                                                                                                                                                                                                                            CTCCTGGCCGCTACTCTTTTTCCCTCTTCTCTGGGCTCTCCCACTCCTGGGGCCGGTCTG 960
                                                                                                                                                                                                                                                                                                                                                                                                                                                               963
                           GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCCAAGGCGGGAAGGATGCCTGCTT 720
                                                                                                                                                                                                                                                                                                                                                                                                                                      CTCCTGGCCACTACTCTTTTTCCCTCTTCTCTGGGGTCTCCCACTCCCTGGGGCCGGTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; PRO; secreted protein; transmembrane protein; enterocolitis; gastrointestinal ulceration; skin disease; ss; gene; abnormal keratinocyte differentiation; psortasis; epithelial cancer; squamous cell carcinoma; Alzheimer's disease; Parkinson's disease; amyotrophic lateral sclerosis; inflammatory disease; rheumatoid arthritis; asthma; multiple sclerosis; organ failure; atherosclerosis; cardiac injury; infertility; birth defect; diabetic complication; wound repair.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human cDNA encoding secreted/transmembrane protein PRO303.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABX71659 standard; cDNA; 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97US-0059113P.
97US-0059117P.
97US-0059117P.
97US-005912P.
97US-005912P.
97US-0059261P.
97US-0059266P.
97US-0052266P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2001US-00909320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10-MAR-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US2002132240-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-JUL-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-SEP-1997;
17-SEP-1997;
17-SEP-1997;
17-SEP-1997;
17-SEP-1997;
18-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18-SEP-1997;
15-OCT-1997;
17-OCT-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-SEP-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1081
                           991
                                                                        664
                                                                                                                       721
                                                                                                                                                                       724
                                                                                                                                                                                                                      781
                                                                                                                                                                                                                                                                   784
                                                                                                                                                                                                                                                                                                                   841
                                                                                                                                                                                                                                                                                                                                                                  844
                                                                                                                                                                                                                                                                                                                                                                                                               901
                                                                                                                                                                                                                                                                                                                                                                                                                                                            904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABX71659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABX71659
```

Kljavin IJ; Tumas D; Hillan KJ, Stewart TA, ¥,ĕ, Gurney Paoni NF, Roy Grimaldi JC, Godowski PJ, Grimaldi Mather JP, Pan J, Pac Williams PM, Wood WI;

WPI; 2003-147434/14.

P-PSDB; ABUS4391

New PRO polypeptides and nucleic acid molecules, useful in diagnosing or treating inflammatory diseases, organ failure, atherosclerosis, cardiac injury, infertility, cancer, AIDS, Alzheimer's disease or Parkinson's disease.

Claim 2; Fig 91; 473pp; English.

The invention relates to an isolated PRO polypeptide having at least 80% amino acid sequence identity to: (a) any one of 61 fully defined amino acid sequence given in the specification (appearing as ABIG5437-catid sequences given in the specification (appearing as ABIG5437-catid sequences given in the specification) ((c) any one of the PRO sequences which can be people in the specification); ((c) any one of the PRO sequences which can sepeciated signal peptide; or (e) an one can be people in the specification); ((c) any one of the PRO sequences which can be people signal peptide; (d) an extracellular domain of the PRO polypeptide which lacks its associated signal peptide; or (e) an one collection catids encoding the PRO polypeptides, vectors, host cells and anti-pRO antibodies. The PRO polypeptides and nucleic acids are useful in diagnosing or treating enterocolitis, gastrointestinal ulceration, skin diseases associated with a sequence catids are useful in diagnosing or treating enterocolitis, gastrointestinal ulceration, skin diseases associated with a sequence all cations, and anti-proposition are anyotrophic lateral sclerosis, inflammatory disease, e.g. cheumatorid arthritis, asthma or multiple sclerosis, organ failure, attenosclerosis, cardiac injury, infertility, birth defects, premature adjug, AlbS cancer, diabetic complications, or mutations in general. The polypeptides are also useful for wound repair and associated therapies concerned with re-growth of tissue. The nucleotide sequences may be used as any bridisation probes in chromosome and gene mapping, or in generating the propagentides, in assays to identify other proteins or molecules are also useful in the market brompsement and secenting of the propertically useful sequences are also useful in the propagentic manigent and secenting of the propagentic and associated therapy, and as molecular weight markers for protein clear transpense therapy, and as molecular weight markers for protein celectrophoresis purpose. The attinity purification of propert PRO polypeptide

Sequence 1100 BP; 225 A; 321 C; 314 G; 240 T; 0 U; 0 Other;

ö 180 240 GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGCCGCTTATCAGGACCATGCGGCCG 120 243 GÓCTGGACTCAGGAAGCCGGAGTCGCAGGAGCCGCCGCTTATCAGGACCATGCGGCCG 123 124 Acceptation acceptation of the contraction of t 241 CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG 300 9 63 GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGAGTGAGCCTGCTCTCAGCCACCG 4 ceceseasasasascarescececececececerecrecrescerecrescres 121 ACGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCGAACTCGGGCGTTGGCCGTG GCAGGGGAGCCTGCGGCATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG Gaps Query Match 99.1%; Score 1090.6; DB 8; Length 1100; Best Local Similarity 99.6%; Pred. No. 4.4e-227; Matches 1093; Conservative 0; Mismatches 4; Indels 0; 61 181 184 244 Query Match

g

8 8 ò 셤

ठ

g ò

ò

964 AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1023 480 483 540 900 603 663 720 780 783 840 963 723 CTACACCCGTTACTTCGTATCCGAATATCTGAGCCCTCGCTACCTGGGGAATTCACC CGTGAGCTGGGGGTGGGCTGTGGTCGGCCCCAATCGGCCCCGGTGTCTACACCAATATCAG CTCCTGGCCACTACTCTTTTTCCCTCTTCTCTGGGCTCTCCCACTCCTGGGGCCGGTCTG CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG CATCIGICAGGCCTCCACATITGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCTCCAGGAAGTTCA CGGTGACTCAGGTGGACCCTTGTACAAACAATGGACTGTGGTATCAGATTGGAGT CCACCACTTTGAGTGGATCCAGAAGCTGATGGCCCAGAGTGGCATGTCCCAGGCCAGACCC CTCCTGGCCGCTACTCTTTTTCCCTCTTCTCTGGGCTCTCCCACTCCTGGGGCCGGTCTG CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACAAACACATCCAGCC GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCCAAGGCGGGGAAGGATGCCTGCTT CGGTGACTCAGGTGGACCCTTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT CGTGAGCTGGGGAGTGGGCTGTGGTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAG 1081 AAAAAAAAAAAAA 1097 1084 AAAAAAAAAAAAAA 1100 961 1021 304 361 364 421 481 484 541 544 604 199 721 724 784 841 844 904 301 424 601 781 901 셤 8 셤 ò 요 8 g 8 ద g ઠે 윱 g à ò ò 셤 8 g 8 셤 ò g 셤 à ઠે

ACH06991 standard; cDNA; 1100 ACH06991; RESULT

BP

Human secreted/transmembrane polypeptide PRO303 cDNA.

(first entry)

08-OCT-2003

Human; gene; ss; abnormal bleeding; gynaecological disease; asthma; hysterectomy; angiogenesis; coronary ischaemic condition; skin disease; gastrointestinal mucosa disorder; acute mucosal lesion; neuropathy; ALS; chronic mucosal lesion; abnormal keratinocyte differentiation; psoriasis; Parkinson's disease; Alzheimer's disease; amyotrophic lateral sclerosis;

```
uncontrolled cell growth; cancer; blood coagulation cascade; thrombosis; haemorrhage; endometrial bleeding; angiogenesis; wound healing; timour; tissue repair; rheumatoid arthritis; multiple sclerosis; tissue typing.
                                                                                           970S-0059113P.
970S-0059113P.
970S-0059113P.
970S-0059113P.
970S-0059113P.
970S-0059122P.
970S-0059122P.
970S-0062287P.
970S-0062287P.
970S-0062387P.
970S-0062387P.
970S-0062387P.
970S-0063123P.
970S-0063121P.
970S-0063124P.
970S-0063124P.
970S-0063124P.
970S-0063124P.
970S-0063124P.
970S-0063124P.
970S-0063124P.
970S-0063124P.
970S-0063124P.
970S-0063128P.
970S-0063138P.
970S-0064809P.
970S-0064809P.
970S-0064809P.
970S-0064809P.
970S-0064809P.
970S-0064809P.
970S-006646P.
970S-006646P.
970S-006646P.
970S-006646P.
970S-006646P.
970S-006646P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98WO-US019437.
98US-0104080P.
98US-0109304P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  98WO-US019177
98WO-US019330
                                                                             10-JUL-2001; 2001US-00902903
                                              US2003044839-A1.
                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13-OCT-1998;
20-NOV-1998;
                                                              06-MAR-2003
                                                                                                                                                   SEP-1997
```

The invention relates to an isolated by Dolypeptide. FACUL 1 is useful in diseases e.g. to avoid or lessen the need for hysterectomy. PRO317 may diseases e.g. to avoid or lessen the need for hysterectomy. PRO317 may also be useful as an agent that affects angiogenesis and PRO317 is useful in anti-tumour indications or in treating occonary ischaemic conditions. PRO211 and PRO217 polypeptides are useful for treating disorders associated with the preservation and maintenance of gastrointestinal motors and the repair of acute and chronic mucosal lesions, skin diseases associated with abnormal keratinocyte differentiation (e.g. psoriasis). PRO19 polypeptide is useful for treating Parkinson's disease, amyotrophic lateral sclerosis (ALS), neuropathies and disease related to uncontrolled cell growth, e.g. cancer. PRO219 colypeptide plays a regulatory role in the blood coaquation cascade. PRO246 polypeptides which serves as tumour specific antigens may be exploited as therapeutic targets for anti-tumour drugs. PRO269 polypeptides which serves as tumour specific antigens may be exploited as therapeutic targets for anti-tumour drugs. PRO269 polypeptides as compared with heparin. PRO317 polypeptides and no fissue repair. PRO314 polypeptides are useful for treating andometrial bleeding angiogenesis. PRO297 polypeptides and multiple sclerosis. The polypeptide and its nucleic acid are useful for tissue typing. PRO antibodies are useful for tissue typing. PRO antibodies are useful in diagnostic assay of sample fluids. Anti-PRO antibodies are useful in diagnostic assays for PRO e.g. detecting its expression in specific cells, tissues or serum and for affinity

The invention relates to an isolated PRO polypeptide. PRO317 is useful in

```
Novel secreted and transmembrane polypeptides and polynucleotides encoding them useful for treating abnormal bleeding involved in gynecological diseases, skin diseases and neurodegenerative diseases.
                                                                                                                                                                                                                                                                                                                                                                   Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N; Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A; Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin LJ; Mather JP, Pan J, Paoni NP, Roy MA, Stewart TA, Tumas D; Williams PM, Wood WI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 3; Fig 91; 478pp; English.
                                                                                                                                            02-DEC-1999; 99W0-US028564.

02-DEC-1999; 99W0-US028565.

20-DEC-1999; 99W0-US030095.

20-DEC-1999; 99W0-US030091.

20-DEC-1999; 99W0-US030991.

20-DEC-1999; 99W0-US030991.

11-FEB-2000; 2000W0-US000519.

11-FEB-2000; 2000W0-US00565.

22-FEB-2000; 2000W0-US005641.

24-FEB-2000; 2000W0-US005841.

20-MAR-2000; 2000W0-US005841.

20-MAR-2000; 2000W0-US005841.

20-MAR-2000; 2000W0-US005841.

20-MAR-2000; 2000W0-US008439.

22-MAR-2000; 2000W0-US014042.

22-MAR-2000; 2000W0-US015264.

28-JUL-2000; 2000W0-US015264.

28-JUL-2000; 2000W0-US015264.
                                                                                                              99WO-US028313.
99WO-US028313.
99WO-US028301.
                       99US-0143048P
                                   99US-0145698P
                                                                   99WO-US020944
99WO-US021090
                                                                                                    99WO-US023089
                                                                                                                                                                                                                                                                                                                                 18-SEP-2000; 2000US-00665350
                                                       99WO-US020594
                                                                                         99WO-US021547
                                                                                                                                                                                                                                                                                                                                                        (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-492258/46.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           P-PSDB; ABO47406.
22-DEC-1998;
22-DEC-1998;
26-JUL-1999;
26-JUL-1999;
28-JUL-1999;
13-SEP-1999;
15-SEP-1999;
15-SEP-1999;
15-SEP-1999;
29-NOV-1999;
20-NOV-1999;
10-DEC-1999;
```

```
AGCCTACCTGAGCCCATGCAGCCTGGGCCCACTGCCAAGTCAGGCCCTGGTTCTCTTGT 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; gene; ss; PRO; secreted; transmembrane; pharmaceutical; diagnostic; bloceactor; therapeutic; hyperplasia; endometricsis; cancer; tumour; tschaemia; coronary arterial disease; polycystic kidney disease; renal failure; inflammatory response; asthma; rheumatoid arthritis; psoriasis; multiple sclerosis; gene therapy; cytostatic; gynecological; cardiant; nephrotropic; hepatotropic; antiinflammatory.
                                                          AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG
                                                                                                                                                         TCTTGTTTGGTAATAACACATTCCAGTTGATGCCTTGCAGGGCATTCTTCAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human secreted/transmembrane protein cDNA, #47.
                                                                                                                                                                                                                 AAAAAAAAAAAAAAA 1097
                                                                                                                                                                                                                                                                AAAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97US-0059113P
97US-0059113P
97US-0059113P
97US-0059121P
97US-0059184P
97US-0059268P
97US-005286F
97US-0062287P
97US-0062287P
97US-00622814P
97US-0062814P
97US-0062814P
97US-0063120P
97US-0063120P
97US-0063120P
97US-0063128P
                                                                                                                                                                                                                                                                                                                                                                                  standard; cDNA; 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12-JUL-2001; 2001US-00905291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JS2002160374-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17.5EP-1997,
17.5EP-1997,
17.5EP-1997,
18.5EP-1997,
18.5EP-1997,
18.5EP-1997,
17.0CT-1997,
24.0CT-1997,
26.0CT-1997,
26.0CT-1997,
28.0CT-1997,
28.0C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29-OCT-1997;
29-OCT-1997;
29-OCT-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28-OCT-1997;
28-OCT-1997;
29-OCT-1997;
29-OCT-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-OCT-2002
                                                                                                                                                                   1024
                                                                         964
                                                                                                                     1021
                                                                                                                                                                                                                    1081
                                                                                                                                                                                                                                                                                                                                                                                  ABX96228
                                                                                                                                                                                                                                                                                                                                                                                                                                 ABX96228;
                                                                                                                                                                                                                                                                                                                                                          ABX96228
                                                                                                                                                                                                                                                                                                                                    RESULT
                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                     8
                                                                                                                                                         a
                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                        g
                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                                                                                                                                                                         ACGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCGAACTCGGGCGTTGGCCGTG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           900
                                                                                                                                                                                                                                                                                                                               GCCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCGTTATCAGGACCATGCGGCCG 120
                                                                                                                                                                                                                                                                                                                                                                             123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGGGCACTCACGCCGCGCCACTGCTTTGAAACCTATAGTGACCTTAGTGATCATCCCTCCGG 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA 363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC 423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         963
purification of PRO from recombinant cell culture or natural sources, The present sequence represents cDNA encoding a human secreted/transmembrane PRO polypeptide
                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                   63
                                                                                                                                                                                                                                                                                                                                                            GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGAACCATGCGGCCG
                                                                                                                                                                                                                                                                  CGCGGGAGAGGAGGCCATGGCGCGCGCGCGCTGCTGCTGCTGCTGCTGCTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTGCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCAGGGGAGCCTGCCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGGGCACTCACGGCGGCGCACTTGAAACCTATAGTGACCTTAGTGATCCTCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGTGAGCTGGGGAGTGGGCTGTGGTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGCGGGAGAGGCCCATGGCCGCGCGCGCGCGCTGCTGCTGCTGCTGCTGCTGCTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGGATGGTCCAGTTTGGCCAGCTGCCATGCCATCCTTCTGGAGCCTGCAGGCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTACACCGGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGGAATTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCCACACCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    creseseracarcasassarsasseacacresecarereceaseacerecassasarrea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGACATCTTTGGAGACATGGTTTGTGCTGGCAACGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGAATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGTGAGCTGGGGGCTGTGGTCGGCCCAATCGGCCCGGTGTCTACACACAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                           Gaps
                                                                                                                                                                                         ;
0
                                                                                                                                        8; Length 1100;
                                                                                            Sequence 1100 BP; 225 A; 321 C; 314 G; 240 T; 0 U; 0 Other;
                                                                                                                                                                                         4; Indels
                                                                                                                                      Score 1090.6; DB 8;
Pred. No. 4.4e-227;
0; Mismatches 4;
                                                                                                                                        99.1%;
                                                                                                                                                                   Best Local Similarity 99.6
Matches 1093; Conservative
                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        £
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        124
                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    904
                                                                                                                                           Query Match
  88888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                요
                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                 엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ⋧
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
```

```
97US-0063738P.
97US-0064215P.
97US-0064103P.
97US-006428P.
97US-0065186P.
97US-0065186P.
97US-0065186P.
97US-0066120P.
97US-0066120P.
97US-0066453P.
97US-0066453P.
97US-0066453P.
97US-0066470P.
97US-0066770P.
97US-0066770P.
                                                                                                                                                                                                                                      2000WO-US005004.
2000WO-US005841.
2000WO-US007377.
2000WO-US008439.
                                                                                                                                                                                          99WO-US028565.
99WO-US030095.
99WO-US030911.
                                                                                                                                                                                                                          2000WO-US003565.
2000WO-US004414.
                                                                                                                                                                                                                                                               2000WO-US014042.
2000WO-US015264.
2000WO-US020710.
                                                                                                                                                     99WO-US021547.
                                                                                                                                                                  99WO-US028214.
                                                                                                                                                                              99WO-US028301.
99WO-US028564.
                                                                                                                             98WO-US025108
                                                                                                                                        99WO-US020944
                                                                                                                                                99WO-US021090
                                                                                                                                                                        99WO-US028313
                                                                                                                                                                                                             99WO-US030999
                                                                                                                                                                                                                                                                                  2000WO-US023328
2000US-00665350
                                                                                                                      98WO-US019437
                                                                                                                                                                                                                         11-FEB-2000;
22-FEB-2000;
                                                                                                                                                                                                                                                                22-MAY-2000;
02-JUN-2000;
                                                                                                                                                                                                                                      24-FEB-2000;
                                                                                                                                                                                                                                                                                 24-AUG-2000;
      29-OCT-1997;
31-OCT-1997;
31-OCT-1997;
03-NOV-1997;
                               07-NOV-1997;
12-NOV-1997;
17-NOV-1997;
18-NOV-1997;
                                                                                                                                                                                                                                                         30-MAR-2000;
                                                              21-NOV-1997;
24-NOV-1997;
                                                                                                                                                      -SEP-1999;
                                                                                                                 16-SEP-1998
                                                                                                                                          -SEP-1999
                                                                                                                                                -SEP-1999
                                                                                                                                                                                                             20-DEC-1999
                                                         21-NOV-1997
                                                                                  24-NOV-1997
                                                                                                                       17-SEP-1998
                                                                                              24-NOV-1997
```

(GETH) GENENTECH INC

Ferrara N;
1 ME, Goddard A;
Kljavin IJ;
Tumas D; Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Srivaroff E, Fong S, Gao W, Gerber H, Gerritsen Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Williams PM, Wood WI;

WPI; 2003-288105/28. P-PSDB; ABU64543.

New secreted and transmembrane PRO polypeptides (e.g. PRO533 or PRO245) and genes encoding them, useful for detecting or treating e.g. hyperplasta, endometriosis, cancers, ischemia, coronary arterial disease or inflammations.

Claim 2; Fig 91; 477pp; English.

to raise The invention discloses isolated PRO secreted/transmembrane polypeptides and the nucleic acid encoding them. The polypeptides can be used to raise antibodies that specifically bind to the PRO polypeptide, for linking a bloactive molecule to a cell expressing a PRO protein and for modulating at least one biological activity of a cell. The PRO polypeptides or polymucleotides are also useful as pharmaceuticals, disappetides or biosensors or bioreactors, for detecting or treating e.g. hyperplasia, endometriosis, cancers (e.g. those involving solid tumours), ischaemia,

903

844

ö 240 coronary arterial disease, polycystic kidney disease, chronic or acute renal failure, or inflammatory responses (e.g. asthma, rheumatoid arthritis, psoriasis or multiple sclerosis) in mammals. The PRO genes may also be used in gene therapy, particularly for replacing a defective gene. The sequences presented in ABX96017-ABX96378 are the genes encoding, the primers amplifying and the probes detecting the PRO polynucleotides of the invention 120 180 243 300 360 480 540 543 9 99 720 780 840 900 123 303 363 420 423 483 603 663 723 783 843 124 ACGGGTCATCACGTCGCGCATCGTGGGTGGAGAGGACGCCGAACTCGGGCGTTGGCCGTG 183 9 63 CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG GTGGATGCTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGCCTA CCACCACTTTGAGTGGATCCAGAAGCTGATGGCCCAGAGTGGCCATTGAGTCCCAGGCCAGACCC GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGCGCCGTTATCAGGACCATGCGGCCG GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG CATCTGTCTCCAGGCCTCCACATTTGAGTTTTGAGAACCGGACAGACTGCTGGGTGGCTGG CGTGAGCTGGGGAGTGGGCTGTGGTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAG cecedeadadeaceareaceaceaceaceaceaceareareareareacearearearea GCTICACITCAGGAAGCCGGAGCAGGAGCGGCGCCCGTTATCAGGACCATGCGGCCG GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG CTGGGCACTCACGCGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA CTACACCCGTTACTTCGTATCGAATATCTGAGCCCTCGCTACCTGGGGAATTCACC CTACACCCGTTACTTCGTATCTATCTGAGCCCTCGCTACCTGGGGAATTCAC CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC CATCTGTCTCCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGTGACTGG CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCCCCCACCCTCCAGGAAGTTCA CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACCACCCCCCAGGAAGTTCA GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTT GGACATCTTTGGAGACATGGTTTGTGCTGGCAACGCCCAAGGCGGGAAGGATGCCTGCTT CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT CGTGAGCTGGGGTGGGTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAG Gaps DB 8; Length 1100; ö Sequence 1100 BP; 225 A; 321 C; 314 G; 240 T; 0 U; 0 Other; 4; Indels Query Match
99.1%; Score 1090.6; DB 8
Best Local Similarity 99.6%; Pred. No. 4.4e-227;
Matches 1093; Conservative 0; Mismatches 4; 4 61 64 121 181 184 241 244 301 304 361 484 541 544 604 661 664 721 724 781 784 841 364 421 124 181 601 88888888888 ઠે 셤 요 셤 셤 g 8 8 ઠે 8 à 유 g ò ઠ ò 8 셤 8 Š a ઠે 셤 ઠે g ò ò g à 셤

g

유

ò

엄

ò

요

Š

```
Sixty one isolated nucleic acids encoding a PRO polypeptide, e.g. PRO245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ME, Goddard A;
Kljavin IJ;
Tumas D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ferrara N;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            noyers L, Eaton DL,
Gerber H, Gerritsen
rney AL, Hillan KJ,
Roy MA, Stewart TA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ashkenazi A, Botstein D, Desnoyers L, Filvaroff E, Fong S, Gao W, Gerber H, Godowski PJ, Grimaldi JC, Gurney AL, Mather JP, Pan J, Paoni NF, Roy MA, Williams PM, Wood WI,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20-DEC-1999; 99W0-US030911.
20-DEC-1999; 99W0-US030999.
05-JAN-2000; 2000W0-US000219.
11-FEB-2000; 2000W0-US00414.
24-FEB-2000; 2000W0-US006414.
24-FEB-2000; 2000W0-US005094.
        97US-0063735P.
97US-006378P.
97US-0063870P.
97US-0064103P.
97US-0064248P.
97US-0065186P.
97US-0065186P.
97US-0065186P.
97US-0066120P.
97US-0066120P.
97US-0066120P.
97US-0066120P.
97US-0066466P.
97US-006671P.
97US-006641P.
97US-006641P.
97US-006641P.
97US-006641P.
97US-006641P.
97US-006641P.
                                                                                                                                                                                                                                                                                                                                                                                                                                       99WO-US028564.
99WO-US028565.
99WO-US030095.
                                                                                                                                                                                                                                                                                            98US-0109304P.
98WO-US025108.
98US-0113296P.
                                                                                                                                                                                                                                                     98WO-US019330
98US-0100858P
                                                                                                                                                                                                                                                                                   98US-0104080P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20-MAR-2000; 2000WO-US00777
30-MAR-2000; 2000WO-US008439
22-MAY-2000; 2000WO-US014042
                                                                                                                                                                                                                                             98WO-US019177
                                                                                                                                                                                                                                                                          98WO-US019437
                                                                                                                                                                                                                                                                                                                           99US-0143048P
                                                                                                                                                                                                                                                                                                                                               99US-0146222P
                                                                                                                                                                                                                                                                                                                                                          99WO-US020594
                                                                                                                                                                                                                                                                                                                                                                                      99WO-US021547
                                                                                                                                                                                                                                                                                                                                                                                                 99WO-US023089
                                                                                                                                                                                                                                                                                                                                                                                                                     99WO-US028313
                                                                                                                                                                                                                                                                                                                                                                                                                              99WO-US028301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2003-331485/31.
P-PSDB; ABU67389.
       29-OCT-1997;
29-OCT-1997;
31-OCT-1997;
31-OCT-1997;
03-NOV-1997;
12-NOV-1997;
17-NOV-1997;
18-NOV-1997;
18-NOV-1997;
24-NOV-1997;
24-NOV-1997;
24-NOV-1997;
                                                                                                                                                                                                                                14-SEP-1998;
14-SEP-1998;
16-SEP-1998;
17-SEP-1998;
17-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                       02-DEC-1999;
02-DEC-1999;
16-DEC-1999;
                                                                                                                                                                                                                                                                                  13-OCT-1998;
20-NOV-1998;
01-DEC-1998;
22-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                  13-SEP-1999;
15-SEP-1999;
15-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                               05-OCT-1999;
29-NOV-1999;
30-NOV-1999;
                                                                                                                                                             24-NOV-1997
24-NOV-1997
                                                                                                                                                                                                    04-JUN-1998
10-SEP-1998
                                                                                                                                                                                 25-NOV-1997
                                                                                                                                                                                            2-DEC-1997
                                                                                                                                                                                                                          0-SEP-1998
                                                                                                                                                                                                                                                                                                                                                         18-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                              01-DEC-1999
AGCCTACCTGAGCCCATGCAGCCTGGGCCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1020
                                                            AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1023
                                                                                        ICTIGITIGGIAATAAACACATICCAGTIGAIGCCTIGCAGGGCAITITITCAAAAAAAA 1080
                                                                                                  963
       CTCCTGGCCGCTACTCTTTTCCCTCTTCTCTGGGGTCTCCCCACTCCTGGGGCCCGGTCTG 960
                                                                                                                                                                                                                                                                                  Human, gene therapy; mucosal lesion, ulcer; enterocolitis; skin disease; psoriasis; cancer; lung cancer; colon cancer; nerve cell disease; Alzheimer's disease; Parkinson's disease; Usher syndrome; angiogenesis; atrophia areata; inflammatory disease; asthma; rheumatorid arthritis;
                       CTCCTGGCCACTACTCTTTTTCCCTCTTCTCTGGGCTCTCCCCACTCCTGGGGCCGGTCTG
                                                                                                                                                                                                                                                               cDNA encoding human secreted protein PRO303.
                                                                                                                                AAAAAAAAAAAAA 1097
                                                                                                                                                   1084 AAAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                                                          97US-0059113P
97US-0059113P
97US-0059113P
97US-0059121P
97US-0059122P
97US-005926B
97US-0062285P
97US-0062285P
97US-0062285P
97US-0062285P
97US-0062814P
97US-0062814P
97US-00631121P
97US-0063121P
97US-0063121P
97US-0063121P
97US-0063121P
97US-0063121P
97US-0063124P
97US-0063544P
                                                                                                                                                                                                   ACA05549 standard; cDNA; 1100
                                                                                                                                                                                                                                                                                                                                                                                                        16-JUL-2001; 2001US-00906742
                                                                                                                                                                                                                                          29-MAY-2003 (first entry)
                                                                                                                                                                                                                                                                                                                           ischaemia; ss; gene
                                                                                                                                                                                                                                                                                                                                                                 US2003023054-A1.
                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                     30-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29-0CT-1997
                                                                  964
                                                                                       1021
                                                                                                                                                                                                                       ACA05549;
                           904
                                                                                                                               1081
        901
                                               196
                                                                                                                                                                                RESULT 10
```

780 783 840 843 900

723

960 963

8 g 셤

ે

셤

8

ò

셤

g

ò

ò

셤 ઠે g 8 g ઠ g ઠે

```
AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTGTG 1020
                                                                                                                                                                                                                                                                                                                                                                                   cartilage;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; ss; gene; gene therapy; tumour; tissue typing; obesity; diabetes; hypoinsulinaemia; hyperinsulinaemia; vascular permeability; cardiac insufficiency disorder; immune response; regeneration; cartilage, auditory hair cell; hearing loss; bone disorder; sports injury;
                                                                                                                                                                                                                                                                                                          CGTGAGCTGGGGAGTGGGCTGTGGTCGGCCCAATCGGCCCCGGTGTCTACACACAATATCAG
                                                                                                                                                                                                                                                                                      CTCCTGGCCGCTACTCTTTTTCCCTCTTCTCTGGGCTCTCCCCACTCCTGGGGCCGGTCTG
                       GGACATCTTTGGAGACATGGTTTGTGCTGGCAACGCCCAAGGCGGGAAGGATGCCTGCTT
                                                          CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT
                                                                                CGGTGACTCCAGGTGGACCCTTGGCCTGTAACAAGAATGGACTGTGTGTATCAGATTGGAGT
                                                                                                                                                                                                            Human secreted / transmembrane polypeptide PRO303 cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACD20216 standard; cDNA; 1100 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1084 AAAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1081 AAAAAAAAAAAAAA 1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   97US-0059122P.
97US-0059184P.
97US-0059263P.
97US-0059266P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97US-0062125P.
97US-0062285P.
97US-006281P.
97US-0063486P.
97US-0062814P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                97US-0059119P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97US-0059115P
97US-0059117P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97US-0063045P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12-JUL-2001; 2001US-00904859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US2003036060-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-SEP-1997;
17-SEP-1997;
17-SEP-1997;
17-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15-OCT-1997;
17-OCT-1997;
17-OCT-1997;
21-OCT-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24-OCT-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-SEP-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-SEP-1997
18-SEP-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      24-OCT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24-OCT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACD20216;
                                                                                                                                                                                                                                                                                                                                                                 961
                                                                                                                                                                                                                                                                                                                                                                                                                                            1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1024
                     664
                                                                                              724
                                                                                                                                     781
                                                                                                                                                                      784
                                                                                                                                                                                                                                                 844
                                                                                                                                                                                                                                                                                      901
                                                                                                                                                                                                                                                                                                                            904
                                                                                                                                                                                                                                                                                                                                                                                                    964
                                                          721
                                                                                                                                                                                                            841
                                                                                    g
                                                                                                                       ઠે
                                                                                                                                                               g
                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                    ઠ
                                                                                                                                                                                                                                                                                                                요
                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                           요
                                                                                                                                                                                                                                                                                                                                                                                                                                          8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                      The invention retailed to an article action encourage of the properties (secreted and transmembrane). The polymuclectide is useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating antisense RNA and DNA, and in gene therapy. The polymucleotide may also be used in preparing PRO polymeptides by recombinant techniques, and in generating either transgenic animals or knock-out animals which, in turn, are useful in the development and screening of therapoutically useful reagents. The PRO polymeptide or the antibody is used in preparing a medicament for treating a condition responsive to the polymeptide or antibody, such as mucosal lesions e.g. ulcers and entercolitis, skin disease e.g. portiasis, cancer e.g. ulug cancer and colon cancer, nerve cell disease e.g. Alzheimer's disease and Parkinson's disease, Usher syndrome, e.g. Alzheimer's disease and Parkinson's disease e.g asthma and rheumatoid arthritis, ischaemia, and in various disgnostic assays. The present sequence represents an cDNA which encodes a PRO polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTT 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             124 ACGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCCGAACTCGGGGCGTTGGCCGTG 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTACACCCGTTACTTCGTATCGAATATCTGAGCCCTCGCTACCTGGGGAATTCACC 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCCCCCAGGAAGTTCA 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCTCCAGGAAGTTCA 603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGTCGCCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA 663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGGGCACTCACGCCGCGCCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGGATGGTCCAGTTTGGCCAGCTGCCATGCCATCCTTCTGGAGCCTGCAGGCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTATGACATTGCTTGGTGAAGCTGTCTGCACCTGTCACCTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
or PRO1868, useful in chromosome and gene mapping, in generating , antisense RNA and DNA, and in treating cancer and Alzheimer's disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 CGCGGGAGAGGAGGACCCATGGGCGCGCGCGCGCGCTGCTGCTGCTGCTGCTGCTCGCTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGCGGGAGAGAGGCCATGGGCGCGCGCGGGGCGCTGCTGCTGCTGCTGCTGCTGGCTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACGGGTCATCACGTCGCGCATCGTGGTGGAGACGCCGAACTCGGGCGTTGGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 99.1%; Score 1090.6; DB 8; Length 1100; Best Local Similarity 99.6%; Pred. No. 4.4e-227; Matches 1093; Conservative 0; Mismatches 4; Indels 0;
                                                                                              invention relates to sixty one nucleic acids encoding PRO
                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 1100 BP; 225 A; 321 C; 314 G; 240 T; 0 U; 0 Other;
                                                          Example 41; Fig 91; 481pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               561
```

셤

8

g

ઠે

```
9703-0063127P-
9703-0063127P-
9703-0063329P-
9703-0063329P-
9703-0063542P-
9703-0063549P-
9703-0063549P-
9703-0063549P-
9703-0063732P-
9703-0063732P-
9703-0063733P-
9703-0063733P-
9703-0063733P-
9703-0064213P-
9703-0064213P-
9703-0064213P-
9703-0064213P-
9703-0064213P-
9703-0064213P-
9703-0064213P-
9703-006513P-
9703-0066421P-
9703-0066421P-
9703-0066421P-
9703-0066453P-
9703-0066641P-
9703-0066472P-
9703-0066472P-
                                                                                                                                                                                                                             98US-0088026P.
98US-0099803P.
98WO-US018824.
98US-0100262P.
                                                                                                                                                                                                                                                                            98WO-US019437.
98US-0104080P.
98US-0109304P.
98WO-US025108.
                                                                                                                                                                                                                                                                                                      99US-0113296P.
99US-0143048P.
99US-0145698P.
                                                                                                                                                                                                                                                         98WO-US019177,
98WO-US019330
                                                                                                                                                                                                                                                                                                                                                                        99WO-US028313.
                                                                                                                                                                                                                                                                                                                                                                                                  99WO-US030095.
                                                                                                                                                                                                                                                                       98US-0100858P
                                                                                                                                                                                                                                                                                                                                                                  99WO-US028214
                                                                                                                                                                                                                                                                                                                                                                                99WO-US028301
                                                                                                                                                                                                                                                                                                                                                                                             99WO-US028565
                                                                                                                                                                                                                                                                                                                                                                                                                       2000WO-US000219
                                                                                                                                                                                                                                                                                                                                                                                                                              2000WO-US003565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2000WO-US023328
                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000WO-US005841
                                                                                                                                                                                                                                                                                                                          99US-01462
                                                                                                                                                                                                                                                                                                                                                                                                                                          2000WO-US005
                                                                                                                                                                                                                                                                                                                                                     99WO-US021
                                                                                                                                                                                                                                                                                                                                             99WO-US02
                                                                                                                                                                                                                                                                                                                                       SU-OW66
                                                                                                               29-OCT-1997;
31-OCT-1997;
31-OCT-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                       05-JAN-2000;
                                       28-OCT-1997
28-OCT-1997
                                                    28-OCT-1997
28-OCT-1997
                                                                               29-OCT-1997
29-OCT-1997
                                                                                                                                   03-NOV-1997
                                                                                                                                           07-NOV-1997
                                                                                                                                                       17-NOV-1997
                                                                                                                                                                     21-NOV-1997
                                                                                                                                                                                 24-NOV-1997
                                                                                                                                                                                                     24-NOV-1997
```

Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N; Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A; Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ; Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D; Williams PM, Wood WI; 18-SEP-2000; 2000US-00665350 (GETH) GENENTECH INC.

WPI; 2003-417923/39. P-PSDB; ABO14909 Novel secreted and transmembrane polypeptide for modulating biological activity of cell expressing the polypeptide, identifying agonists or antagonists of polypeptide, and as molecular weight markers.

Claim 2; Fig 91; 469pp; English.

The invention relates to an isolated, secreted and transmembrane polypeptide, termed FRO polypeptide. The polypeptide is useful for identifying agonists of the polypeptide, for preparing variants of the polypeptide, as molecular weight markers for protein electrophoresis purpose and the nucleic acid is useful for recombinantly expressing those markers. The polypeptide is also useful as therapeutic agent. PRO is useful in assays to identify other proteins or molecules involved in binding interaction. The nucleic acid is useful as therapeutic antistanse RNA and DNA, in the preparation of PRO polypeptide, in generation of antisense RNA and DNA, in the preparation of PRO polypeptide, for cagents, to construct hybridisation for therapeutically useful cagents, to construct hybridisation probes for mapping the gene which encodes the PRO and for the genetic analysis of individuals with genetic disorders, in gene therapy, for chromosome identification, as chromosome marker, and for generating probes for polymerase chain reaction (PCR), Northern analysis for PRO, e.g. detecting its expression in suseful in diagnostic assays for PRO, e.g. detecting its expression in genetic cells, tissues or serum and for affinity purification of PRO from recombinant cell culture or natural sources. The polypeptide or its antibody e.g. tumour. The polypeptide and the nucleic acid is useful for the preparation of medicament for treating conditions which is responsive to the PRO polypeptide or anti-PRO antibody e.g. tumour. The polypeptide and the nucleic acid is useful for the preparation of execution of execution to the preparation of execution of execution of process the constitutions which is responsive to the PRO polypeptide or anti-PRO antibody e.g. tumour. The polypeptide is useful for treating observed. or hypo- or hyper-insulinaemia and cardiac insufficiency disorders, for inhibiting tumour growth, enhances vascular permeability and immune responses, for inducing regeneration of auditory hair cells and for treating hearing loss in mammals and for treating bone and/or cartilage disorders such as sports injuries and arthritis. The present sequence represents cDNA encoding a human secreted and transmembrane PRO polypeptide

Sequence 1100 BP; 225 A; 321 C; 314 G; 240 T; 0 U; 0 Other;

Gaps 99.1%; Score 1090.6; DB 8; Length 1100; 99.6%; Pred. No. 4.4e-227; ive 0; Mismatches 4; Indels 0; Matches 1093; Conservative Local Similarity Query Match

9

61 GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGCGGCGCCGTTATCAGGACCATGCGGCCG 120 63 64 GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGGGGCGCCGTTATCAGGACCATGCGCCG 셤 à

121 ACGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCGAACTCGGGCGTTGGCCGTG 180 124 Acedencarchiceccentereses and acedeses are acedeses and acedeses acedeses and acedeses are acedeses and acedeses acedes acedeses acedes acedeses acedes acedeses acedes acedes acedeses acedes acedes acedes acedeses acedes ace 181 GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTGCTCCACCG ò 셤

184 GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCGTCAGCCACG

a ð

```
keratinocyte differentiation, epithelial cancer, Alzheimer's disease, squamous cell carcinoma, Parkinson's disease, inflammatory disease, amyotrophic lateral sclerosis; rheumatoid arthritis; asthma, multiple sclerosis; organ fallure, atherosclerosis; cardiac injury; infertility; birth defect; premature aging; ALDS; cancer; diabetic complication; wound repair; tissue re-growth; gene; ss.
                                                                                                                                                                                                                                   97US-0059113P

97US-0059113P

97US-0059113P

97US-0059113P

97US-0059113P

97US-0059113P

97US-0062814P

97US-0062814P

97US-0062814P

97US-0062814P

97US-0062814P

97US-0063120P

97US-0066110P

97US-0066410P

97US-0066410P

97US-0066410P

97US-0066415P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98WO-US019177.
98WO-US019330.
98US-0100858P.
                                                                                                                                                                                                         2001US-00903640
                                                                                                                                            US2003017463-A1.
                                                                                                                                                                                                                                                                      17-SEP-1997
17-SEP-1997
17-SEP-1997
17-SEP-1997
18-SEP-1997
18-SEP-1997
18-SEP-1997
17-OCT-1997
24-OCT-1997
24-OCT-1997
24-OCT-1997
24-OCT-1997
24-OCT-1997
24-OCT-1997
28-OCT-1997
28-OCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14-SEP-1998;
16-SEP-1998;
17-SEP-1998;
                                                                                                             Homo sapiens.
                                                                                                                                                                                                       11-JUL-2001;
                                                                                                                                                                          23-JAN-2003
    TCTTGTTTGGTAATAAACACATTCCAGTTGATGCCTTGCAGGGCATTCTTCAAAAAAA 1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTTCTG 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1023
                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                  999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     963
                                                                                                                            420
                                                                                                                                                                                                                                                       540
                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                              720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      960
                                  303
                                                                 360
                                                                                             363
                                                                                                                                                           423
                                                                                                                                                                                                                      483
                                                                                                                                                                                                                                                                                    543
                                                                                                                                                                                                                                                                                                                                                   603
                                                                                                                                                                                                                                                                                                                                                                                                               663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     903
                                                                                                                         CTGGGCACTCACGGGGGGGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG
                                                               GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA .
                                                                              GIGGAIGGICCAGITIGGCCAGCTGCATCCATCCTTCTGGAGCCTGCAGGCCIA
                                                                                                                                                                                                            CTATGACATTGCCTTGGTGAAGCTGTCTGCAGCCCTGTCACCTAAAACACATCCAGCC
                                                                                                                                                                                                                                                                         CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACGGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                      CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCCACCCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                    GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGAATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cereaecreseagresecreresresececearceseceserereracaearayeas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ccaccactricagicaarccagaagcigaiggecccagagicgcaigiccagccagaccc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTCCTGGCCGCTACTCTTTTCCCTCTTCTCTGGGCTCTCCCCACTCCTGGGGCCGGTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTCCTGGCCACTACTCTTTTTCCCTCTTCTCTGGGCTCTCCCACTCCTGGGGCCGGTCTG
                               crosscacrosscacroscroscratesaaccrarasteaccrrastearccross
                                                                                                                                                                                          CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC
                                                                                                                                                                                                                                                       CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                     CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCCACACCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                  GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGACATCTTTGGAGACATGGTTTGTGCTGGCAACGCCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGTGAGCTGGGGGTGGGCTGTGGTCGGCCCCAATCGGCCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human, secreted and transmembrane protein, gene therapy, psoriasis, enterocolitis, gastrointestinal ulceration, skin disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel human secreted and transmembrane protein PRO303 cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAAAAAAAAAAAA 1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACASS019 standard; cDNA; 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      05-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1081
                                  244
                                                                                             304
                                                                                                                            361
                                                                                                                                                           364
                                                                                                                                                                                         421
                                                                                                                                                                                                                                                       481
                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                    544
                                                                                                                                                                                                                                                                                                                                                                                  601
                                                                                                                                                                                                                                                                                                                                                                                                                                                661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1084
                                                                 301
                                                                                                                                                                                                                        424
                                                                                                                                                                                                                                                                                      484
                                                                                                                                                                                                                                                                                                                                                                                                                 604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACA55019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 12
ACA55019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                          셤
                                                               ઠે
                                                                                   g
                                                                                                                    8
                                                                                                                                                   g
                                                                                                                                                                                ઠે
                                                                                                                                                                                                                임
                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
```

```
98WO-US019437.
98US-010400P.
98WG-0109304P.
98US-0113296P.
99US-0143048P.
99US-0145698P.
99US-0145622P.
                                                                                                                           2000WO-US004414.
2000WO-US005004.
                                                                                                                                      2000WO-US005841.
2000WO-US007377.
2000WO-US008439.
                                                                                 99WO-US028301.
                                                99WO-US020944.
99WO-US021090.
                                                           99WO-US021547.
99WO-US023089.
                                                                                     99WO-US028564.
                                                                                                99WO-US030095.
                                                                                                                       2000WO-US003565.
                                                                                                                 2000WO-US000219
                                                                           99WO-US028313
                                                                                                           99WO-US030999
                                                                                                                                                      2000WO-US014042
                                                                                                                                                            2000WO-US015264
                                                                                                                                                                      2000WO-US023328
                                                                      99WO-US028214
                                                                                                                                                                                      (GETH ) GENENTECH INC.
                                          08-SEP-1999;
13-SEP-1999;
15-SEP-1999;
                                                                                                                05-JAN-2000;
                                                                                                                           22-FEB-2000;
                                                                                                                                 24-FEB-2000;
                                                                                                                                                30-MAR-2000;
                                                                                                                                                      22-MAY-2000;
                                                                                                                                                                           18-SEP-2000;
                      22-DEC-1998
                          07-JUL-1999
26-JUL-1999
                                     28-JUL-1999
                                                                05-OCT-1999
29-NOV-1999
                                                                                     02-DEC-1999
                                                                                                 6-DEC-1999
                                                                                DEC-1999
```

Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N; Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A; Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ; ... Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D; Williams PM, Wood WI;

WPI; 2003-341586/32. P-PSDB; ABU69666.

5 New PRO polypeptides and nucleic acid molecules, useful in diagnosing or treating inflammatory diseases, organ failure, atherosclerosis, cardiac injury, infertility, cancer, AIDS, Alzheimer's disease or Parkinson's disease

Claim 2; Fig 91; 473pp; English.

The invention describes sixty one nucleic acids encoding PRO polypeptides (secreted and transmembrane). The PRO polypeptides and nucleic acids are useful in diagnosing or treating entercolitis, gastrointestinal culeration, skin diseases associated with abnormal keratinocyte differentiation, e.g. psoriasis or epithelial cancers such as squamous cell carcinoma. Alzheimer's disease, e.g. rheumatoid arthritis, asthma or multiple sclerosis, organ failure, atherosclerosis, cardiac injury, infertility, birth defects, premature aging, ADS, cancer, diabetic complications, or mutations in general. The polypeptides are also useful in gene therapy, and as molecular weight markers for protein clectrophoresis purposes. The anti-PRO antibodies may be used in genetherapy, and as molecular weight markers for protein clectrophoresis purposes. The anti-PRO antibodies may be used in crecombinant cell culture or natural sources. This sequence encodes a recombinant cell culture or natural sources. This sequence encodes a

Sequence 1100 BP; 225 A; 321 C; 314 G; 240 T; 0 U; 0 Other;

. Query Match

99.1%; Score 1090.6; DB 8; Length 1100;

ocal Similarity 99.6%; Pred. No. 4.4e-227; s 1093; Conservative 0; Mismatches 4; Indels 0; Gaps 0;	1 CGCGGGAGAGGCCATGGGCGCGCGGGGGCGCTGCTGCTGCTGCTGCTGCTGCTCGCTCG 60	61 GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGGGGCCCGTTATCAGGACCATGCGGCCG 120	121 ACGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCGAACTCGGGCGTTGGCCGTG 180	181 GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACC 240	241 CTGGGCACTCACGGGGGGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG 300 244 CTGGGCACTCACGGGGGGGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG 303	301 GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA 360 	361 CTACACCOGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC 420	421 CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAACACATCCAGCC 480	481 CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG 540	541 CTGGGGGTACATCAAAGAGATGAGGCACTGCCATCTCCCCACACCTCCAGGAAGTTCA 600 [601 GGTCGCCATCATAAACAACTCTATGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA 660 	661 GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGGGGAAGGATGCCTGCTT 720	721 CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT 780 	781 CGTGAGCTGGGGAGTGGGCTGTGGTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAG 840	841 CCACCACTTTGAGTGGATCCAGAAGCTGATGGCCCAGAGTGGCATGTCCCAGCCAG	901 CTCCTGGCCGCTACTCTTTTCCCTCTTCTCTGGGCTCTCCCACTCCTGGGGCCGGTCTG 960	61 AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTT 	1021 TCTTGTTTGGTAATAAACACATTCCAGTTGATGCCTTGCAGGGCATTTTTCAAAAAAA 1080
Best Local Si Matches 1093				-		-	64	н 4		-			721 (841 (01		21
Besi	දු පු	දු පු	상 염	oy B	\$ g	oy P	oy D	% <u>9</u>	کو م	λο q	yo da	& q	% q ₀	λ ₀ q ₀	ራ 8	کو م	δ O	ò

```
The invention relates to an isolated secreted and transmembrane PRO polypeptide. The PRO polypeptides are useful for modulating biological activity of a cell, in diagnosing or treating abnormal bleeding involved
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Novel secreted and transmembrane polypeptides and polynucleotides encoding them useful for treating abnormal bleeding involved in gynecological diseases, skin diseases and neurodegenerative diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Botstein D, Desnoyers L, Eaton DL, Ferrara N; Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A; Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ; Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 2; Fig 91; 467pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                        02-DEC-1999; 99W0-US028564.

02-DEC-1999; 99W0-US028565.

16-DEC-1999; 99W0-US030095.

20-DEC-1999; 99W0-US030091.

20-DEC-1999; 99W0-US030099.

05-JAN-2000; 2000W0-US000219.

11-FEB-2000; 2000W0-US00565.

22-FEB-2000; 2000W0-US0056414.

24-FEB-2000; 2000W0-US005641.

24-FEB-2000; 2000W0-US005641.

25-MAR-2000; 2000W0-US005641.

27-MAR-2000; 2000W0-US005431.

27-MAR-2000; 2000W0-US006431.
                                 97US-0066120P.
97US-0066364P.
97US-0066468P.
97US-006646EP.
97US-0066711P.
97US-00667720P.
                                                                                                                                                 98US-0099803P.
98WG-US01834.
98WG-US01834.
98WG-US019177.
98WG-US019330.
98WG-US019437.
98US-0109304P.
98WG-US025108.
98WG-US025108.
                                                                                                                 97US-0066840P.
97US-0069425P.
98US-0088026P.
                                                                                                                                                                                                                                                                                                                                                            99WO-US023089.
99WO-US028214.
99WO-US028313.
99WO-US028301.
             97US-0065846P
                                                                                                                                                                                                                                                                                         99US-0145698P.
                                                                                                                                                                                                                                                                                                                             99WO-US020944
99WO-US021090
                                                                                                                                                                                                                                                                                                                 99WO-US020594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2000WO-US020710
2000WO-US023328
                                                                                                                                                                                                                                                                                                                                                    99WO-US021547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000US-00665350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Wood WI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-417249/39.
P-PSDB; ABO14848.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ashkenazi A, Botsue
Filvaroff E, Fong S
Godowski PJ, Grima'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Williams PM,
12-NOV-1997;
17-NOV-1997;
18-NOV-1997;
21-NOV-1997;
21-NOV-1997;
24-NOV-1997;
                                                                   24-NOV-1997;
24-NOV-1997;
24-NOV-1997;
24-NOV-1997;
                                                                                                                                                             10-SEP-1998;
14-SEP-1998;
14-SEP-1998;
16-SEP-1998;
17-SEP-1998;
17-SEP-1998;
                                                                                                                                                                                                                                 13-OCT-1998;
20-NOV-1998;
01-DEC-1998;
                                                                                                                                                                                                                                                                                        26-JUL-1999;
28-JUL-1999;
08-SEP-1999;
                                                                                                                                                                                                                                                                                                                           13-SEP-1999;
15-SEP-1999;
15-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                            05-OCT-1999;
29-NOV-1999;
30-NOV-1999;
01-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         28-JUL-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24-AUG-2000;
18-SEP-2000;
                                                                                                                   25-NOV-1997
                                                                                                                                                                                                                                                                  22-DEC-1998
                                                                                                                                                     10-SEP-1998
  1024 TCTTGTTTGGTAATAAACACATTCCAGTTGATGCCTTGCAGGGCATTCTTCAAAAAAA 1083
                                                                                                                                                                                          Human; ss; gene; gene therapy; apoptosis; bleeding; tumour; ALS; gynaecological disease; hysterectomy; angiogenesis; skin disease; cancer; coronary ischaemic condition; gastrointestinal mucosa disorder; asthma; mucosal lesion repair; keratinocyte differentiation; psoriasis; Parkinson's disease; Alzheimer's disease; amyotrophic lateral sclerosis; neuropathy; blood coaquiation cascade disorder; thrombosis; haemorrhage; neurodegenerative disease; endometrial bleeding; wound healing; tissue repair; rheumatoid arthritis; multiple sclerosis; tissue typing.
                                                                                                                                                                        Human secreted / transmembrane polypeptide PRO303 cDNA.
                                                                                                      BP
                        AAAAAAAAAAAAA 1097
                                             AAAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                                       970S-0059115P

970S-0059113P

970S-0059121P

970S-0059121P

970S-0059124P

970S-0059124P

970S-0059124P

970S-0062287P

970S-0062287P

970S-0062287P

970S-0063124P

970S-0063121P

970S-0063123P

970S-0063124P

970S-0063124P
                                                                                                     ACD19854 standard; cDNA; 1100
                                                                                                                                                                                                                                                                                                                                                                        2001US-00906838
                                                                                                                                                 22-AUG-2003 (first entry)
                                                                                                                                                                                                                                                                                                                          US2003027143-A1
                                                                                                                                                                                                                                                                                                                                                                       16-JUL-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18 - SEP - 1997;

18 - OCT - 1997;

17 - OCT - 1997;

17 - OCT - 1997;

24 - OCT - 1997;

27 - OCT - 1997;

28 - OCT - 1997;

28 - OCT - 1997;

28 - OCT - 1997;
                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                           17-SEP-1997;
17-SEP-1997;
17-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -OCT-1997;
-OCT-1997;
-OCT-1997;
-OCT-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                  06-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                               17-SEP-1997
                                                                                                                                                                                                                                                                                                                                                                                                         17-SEP-1997
17-SEP-1997
                                                                                                                          ACD19854;
                                             1084
                        1081
                                                                                                      8
                                           g
```

```
97US-0059113P.
97US-0059117P.
97US-0059110P.
97US-0059121P.
97US-0059121P.
97US-0059263P.
97US-0059266P.
97US-0062285P.
97US-0062285P.
97US-0062285P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US2003092002-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-SEP-1997;
17-SEP-1997;
17-SEP-1997;
18-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-SEP-1997;
15-OCT-1997;
17-OCT-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21-0CT-1997;
24-0CT-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17-SEP-1997
17-SEP-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-SEP-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17-0CT-1997
                                                                                                                                                                                                                                                                                                                                                                                  904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADB29461;
                                   664
                                                                                                                      724
                                                                                                                                                                 781
                                                                                                                                                                                                              784
                                                                                                                                                                                                                                                                                                 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1021
                                                                            721
                                                                                                                                                                                                                                                         841
                                                                                                                                                                                                                                                                                                                                         901
                                                                                                                                                                                                                                                                                                                                                                                                                            961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADB29461
                                                                            ò
                                                                                                                                                          ઠે
                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                    임
                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                              원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ծ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BREEFE BR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Š
in gynaecological diseases e.g. to avoid or lessen the need for 'hysterectomy, for treating angiogenesis, tumour, coronary ischaemic condition, disorders associated with the preservation and maintenance of gastrointestinal mucosa and the repair of acute and chronic mucosal (differentiation) (e.g. psoriasis), Parkinson's disease, Alzheimer's disease, amyorrophic lateral solerosis (ALS), neuropathies, disease, Cascade disorders, neurodegenerative disease, hrombosis, haemorrhage, cascade disorders, neurodegenerative disease, thrombosis, haemorrhage, endometrial bleeding, wound healing, tissue repair, asthma, rheumatoid arthritis, multiple sclerosis. Nucleic acid encoding PRO polypeptides are useful in molecular biology including uses as hybridisation probes and in the generation of antisense RNA and DNA, for preparing PRO polypeptides, for generating transgenic animals or knockout animals. The PRO antiboddes are useful for immunohistochemical staining and/or assay of sample fluids. Anti-PRO antibodies are useful in diagnostic assays for sample fluids. Anti-PRO antibodies are useful in diagnostic assays for SPO es dietecting its expression in specific cells, tissues or serum and for affinity purification of PRO from recombinant cell culture or natural sources. The present sequence represents CDNA encoding a human secreted and transmembrane PRO polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGCGCCGTTATCAGGACCATGCGGCCG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          124 ACGGGTCATCACGTCGCGCATCGTGGGTGGAGGACGCCCGAACTCGGGCGTTGGCCGTG 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGGGCACTCACGGCGGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCTCCGG 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGCCCGTTATCAGGACCATGCGGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACGGGTCATCACGTCGCGCATCGTCGCGAGAGGACGCCCGAACTCGGGCGTTGGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTACACCCGTTACTTCGTATCGAATATCTTATCTGAGCCCTCGCTACCTGGGGGAATTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACCCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCAGGGGAGCCTGCGCGCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGGGCACTCACGGCGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTACACCCGTTACTTCGTATCGAATATCTGTGTGCCCTCGCTACCTGGGGAATTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACACAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               544 CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACCCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99.1%; Score 1090.6; DB 9; Length 1100; 99.6%; Pred. No. 4.4e-227; Artive 0; Mismatches 4; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1100 BP; 225 A; 321 C; 314 G; 240 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity 99.6
Matches 1093; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
           ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ∂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð,
```

```
840
                                                                                                                                                                                                                                                                                                                                          843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; gene; ss; PRO; secreted; transmembrane; gastrointestinal mucosa; mucosal lesion; skin disease; keratinocyte differentiation; psoriasis; Parkinson's disease; Alzheimer's diseases; amyotrophic lateral sclerosis; ALS; neuropathy; cell growth; cancer; tumour; viral infection; neurodegenerative disease; antithrombotic agent; haemorrhage; andometrial bleeding angiogenesis; kidney tissue, apoptosis; therapeutic; tissue typing; immunohistochemical staining; gene therapy; nootropic; neuroprotective; cytostatic; virucide; anticoagulant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     903
                                                                                                                                                      CGTGAGCTGGGGAGTGGGCTGTGGCTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCACCACTTTGAGTGGATCCAGAAGCTGATGGCCCAGAGTGGCATGTCCCAGGCCAGACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTCCTGGCCGCTACTCTTTTCCCTCTTCTCTGGGCTCTCCCACTCCTGGGCCGGTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       <u> AGCCTACCTGAGCCCATGCAGCCTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTTTG</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      964 Acceracerdadeceargeadecredecederacedadeceargecerdericiere
                                                                                                                    CGGTGACTCAGGTGGACCCTTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                  CGTGAGCTGGGGAGTGGGCTGTGGTCGGCCCAATCGGCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                 CCACCACTTTGAGTGGATCCAGAAGCTGATGGCCCAGAGTGGCCATGTCCCAGGCCAGACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTCCTGGCCACTACTCTTTTTCCCTCTTCTGGGCTCTCCCCACTCCTGGGGCCCGGTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human secreted/transmembrane protein cDNA, #49.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1081 AAAAAAAAAAAAA 1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1084 AAAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADB29461 standard; cDNA; 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10-JUL-2001; 2001US-00902615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20-NOV-2003 (first entry)
```

```
9705 - 0063120P - 9708 - 0063329P - 9708 - 0063329P - 9708 - 0063544P - 9708 - 0063544P - 9708 - 0063544P - 9708 - 0063544P - 9708 - 0063549P - 9708 - 0063732P - 9708 - 0064248P - 9708 - 0066464P - 9708 - 00664770P - 9708 - 0066470P -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98WO-US019177.
98WO-US019330.
98US-0100858P.
98WO-US019437.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98US-0104080P.
98US-0109304P.
98WO-US025108.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99WO-US030095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99US-0145698P
99US-0146222P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99WO-US020594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99WO-US028313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99WO-US028301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2000WO-US014042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98US-01132
99US-01430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99WO-US02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99WO-US02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SU-OW66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22-MAY-2000;
```

```
Ferrara N;
n ME, Goddard A;
Kljavin IJ;
                                                      Tumas D;
                                     Botstein D, Desnoyers L, Eaton DL, Fong S, Gao W, Gerber H, Gerriteen Grimaldi JC, Gurney AL, Hillan KJ, Pan J, Paoni NF, Roy MA, Stewart TA,
02-JUN-2000, 2000WO-US015264.
28-JUL-2000, 2000WO-US020110.
24-AUG-2000, 2000WO-US023328.
18-SEP-2000, 2000US-00665350.
                                    Ashkenazi A, Botstein D
Filvaroff B, Fong S, G
Godowski PJ, Grimaldi J
Mather JP, Pan J, Paon
Williams PM, Wood WI;
                          (GETH ) GENENTECH INC.
                                                                     WPI; 2003-765473/72.
P-PSDB; ADB29462.
```

Novel isolated native PRO polypeptide useful for treating Parkinson's disease, enterocolitis, Zollinger-Ellison syndrome gastrointestinal ulceration, Alzheimer's disease, amyotrophic lateral sclerosis, Usher syndrome.

Claim 2; Fig 91; 469pp; English.

The invention discloses isolated PRO secreted/transmembrane polypeptides and the nucleic acid encoding them. The polypeptides can be used to a raise antibodies that specifically bind to the PRO polypeptides, for linking a becautive molecule to a call expressing a PRO polypeptides. The PRO to detecting other PRO polypeptides are useful for detecting other PRO polypeptides are useful for detecting other PRO polypeptides are useful for modulating the bological activity of a cell. PRO polypeptides are useful for detecting disorders associated with the preservation and maintenance of gastrointestinal mucosa and the repair of actle and chronic mucosal leafons, skin diseases associated with the preservation and maintenance of gastrointestinal mucosa and the repair of actle and chronic mucosal leafons, skin diseases associated with the preservation and maintenance of gastrointestinal mucosa and the repair of actle and chronic mucosal diseases, anyworophic lateral sclerosis (ALS), menopathies and additionally, disease related to uncontrolled cell growth, e.g. cancer. PRO polypeptides also serves as tumour specific antigens which may be exploited as therapeutically in vivo for lessening the effects of vixal antithrombotic agent with reduced risk for hemorrhage as compared with enpair, in treating other PRO-apsociated diseases or their reversal, as an antithrombotic agent with reduced risk for hemorrhage as compared with epparin, in treating other PRO-apsociated diseases or their reversal, as an antithrombotic agent with reduced risk for hemorrhage as compared with enpared hemorrhage as role in mapping and their polymorlagement and serversal, as an entitation other and part and antides, for generating transpence of compared of chromosome and gene mapping, in the generating transpence are useful as molecular marker for proper and sendential with genetic disorders as well as for recombinantly certerapeutic agents, for servening confidividual with genetic disorders as well as for recombination of subtroblement and for altini recombinant cell culture or natural sources. The PRO genes may also lused in gene therapy, particularly for replacing a defective gene. Ti sequence presented is a gene encoding a PRO polynucleotide of the

Sequence 1100 BP; 225 A; 321 C; 314 G; 240 T; 0 U; 0 Other;

Length 1100; Score 1090.6; DB 9; Pred. No. 4.4e-227; 99.1%; Query Match Best Local Similarity

엄

셤

ò

g

8

8

g

8 6 8

ò

ద

ò

셤

ઠે

g

ò පු ò g ò g ò 유 à g ò 셤 ઠે 셤 à 셤 ò

ò

```
Human; gene; ss; PRO; secreted; transmembrane; gastrointestinal mucosa; mucosal lesion; skin disease; keratinocyte differentiation; psoriasis; Parkinson's disease; Albreimer's diseases; amyotrophic lateral sclerosis; ALS; neuropathy; cell growth; cancer; tumour; viral infection; neurodegenerative disease; antithrombotic agent; haemorrhage; and monetrial bleeding anglogenesis; kidney tissue; apoptosis; therapeutic; tissue typing; immunohistochemical staining; gene therapy; nootropic; neuroprotective; cytostatic; virucide; anticosqulant.
                                                                                                                                                                                                                                                                Human secreted/transmembrane protein cDNA, #49.
                                                                                                                                                   ВÞ
                        1097
                                                         1084 AAAAAAAAAAAAAA 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              970S-0059113P
970S-0059117P
970S-0059121P
970S-0059121P
970S-0059121P
970S-0059128P
970S-0059285P
970S-0052285P
970S-005288P
970S-005288P
970S-005288P
970S-005288P
970S-0053848P
970S-0053848P
970S-0053848P
970S-0053848P
970S-0053848P
970S-0053848P
970S-0063848P
970S-0063848P
970S-0063848P
970S-0063848P
970S-0063848P
970S-0063848P
                                                                                                                                                   ADA18317 standard; cDNA; 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97US-0063734P.
97US-0063735P.
97US-0063738P.
97US-0064215P.
97US-0063870P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   97US-0064248P.
97US-0064809P.
97US-0065186P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2001US-00906646
                      1081 AAAAAAAAAAAAAA
                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JS2003039971-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16-JUL-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   03-NOV-1997;
07-NOV-1997;
12-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17.58P-1997,
18.58P-1997,
18.58P-1997,
17.0CT-1997,
24.0CT-1997,
24.0CT-1997,
24.0CT-1997,
24.0CT-1997,
24.0CT-1997,
24.0CT-1997,
24.0CT-1997,
25.0CT-1997,
26.0CT-1997,
27.0CT-1997,
28.0CT-1997,
28.0CT-1997,
28.0CT-1997,
28.0CT-1997,
29.0CT-1997,
20.0CT-1997,
20.0C
                                                                                                                                                                                                                            20-NOV-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-SEP-1997;
17-SEP-1997;
17-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27-FEB-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-SEP-1997
17-SEP-1997
                                                                                                                                                                                       ADA18317;
                                                                                                                                ADA18317
                                                                                                               RESULT
                                                                                                                                                                  셤
                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1020
   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1021 TCTTGTTTGGTAATAAACACATTCCAGTTGATGCCTTGCAGGGCATTTTTCAAAAAAA 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCTTGTTTGGTAATAAACACATTCCAGTTGATGCCTTGCAGGGCATTCTTCAAAAAAA 1083
                                                                                                               120
                                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                      303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         840
                                                                                                                                               123
                                                                                                                                                                                      180
                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                 243
                                                                                                                                                                                                                                                                                                                                                                                                        GTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   540
                                                                                                                                                                                                       363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTACACCCGTTACTTCGTATCGAATATCTGAGCCCTCGCTACCTGGGGAATTCACC 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         963
                                        9
                                                                        63
                                                                                                                                GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCTTATCAGGACCATGCGGCCG
                                                                                                                                                                                                                                                                                                                                                       CTGGGCACTCACGGCGGCGCACTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG
                                                                                                                                                                                                                                                                                CTGGGCACTCACGGCGGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGGATGGTCCAGTTTGCCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCCACCCTCCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCG
                                                                                                                                                                                    ACGGGTCATCACGTCGCGCATCGTGGAGGAGGACGCCCGAACTCGGGCGTTGGCCGTG
                                                                                                                                                                                                                                                           GCAGGGGAGCCTGCGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTACACCTACACCACCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTATGACATTGCCTTGGTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATCTGTCTCCAGGCCTCCACATTTGAGTTTGAGAACCGGACAGACTGCTGGGTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCTCCCCACACCCTCCAGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGACATCTTTGGAGACATGGTTTGTGCTGGCAACGCCCCAAGGCGGGAAGGATGCCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGGTGACTCAGGTGGACCCTTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGAATGGACTGTGGTATCAGATTGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGTGAGCTGGGGAGTGGGCTGTCGGCCCAATCGGCCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CGTGAGCTGGGGAGTGGCTGGGCCCCAATCGGCCCGGTGTCTACACCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCACCACTTTGAGTGGATCCAGAAGCTGATGGCCCAGAGTGGCCATGTCCCAGGCCAGACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTCCTGGCCGCTACTTTTTCCCTCTTCTCTGGGCTCTCCCACTCCTGGGGCCCGGTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      crecrescenciarinaricarinaricarinarias
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGCCTACCTGAGCCCATGCAGCCTGGGGCCCAAGTCAGGCCCTGGTTCTCTTCTG
   Gaps
   ö
 4; Indels
 Mismatches
 ö
Matches 1093; Conservative
                                                                                                                                               64
                                                                                                                                                                                    121
                                                                        4
                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                               184
                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                      244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  364
                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                             304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1024
```

```
970S-0065693P-
970S-0066120P-
970S-0066454P-
970S-006646EP-
970S-0066710P-
970S-0066770P-
970S-0066770P-
970S-0066772P-
970S-0069802EP-
980S-0099803P-
980S-0100262P-
980S-0100262P-
980S-010018039-
980S-010018039-
980O-US019177-
                                                                                          98US-0104080P.
98UC-0109304P.
98UC-01302508.
99US-0145698P.
99US-0145698P.
99US-0145698P.
                                                                                                                                                                                                     2000WO-US004414.
                                                                                                                                                                    99WO-US028564
                                                                                                                                                     99WO-US028214
                                                                                                                                                                             99WO-US030095
                                                                                                                                                                                 99WO-US030911
                                                                                                                                                                                       99WO-US030999
                                                                                                                                                                                                2000WO-US003565
                                                                                                                                                                                                                                      2000WO-US020710
                                                                                                                                                                                                                                                2000US-00665350
                                                                                                                                      99WO-US021
99WO-US021
                                                                                                                                                              99WO-US028
                                                                                                                                                99WO-US023
                                                                                                                                                          SU-OM66
                                                                                                                                                                                           5-JAN-2000;
1-FEB-2000;
                                               12-DEC-1997
04-JUN-1998
                   24-NOV-1997
                                                                                      17-SEP-1998
                                                                                                                                                                                                                                  32-JUN-2000
```

(GETH) GENENTECH INC.

Ferrara N; ME, Goddard A; Kljavin IJ; Tumas D; , Botstein D, Desnoyers L, Eaton DL, Pong S, Gao W, Gerber H, Gerritsen Grimaldi JC, Gurney AL, Hillan KJ, Pan J, Paoni NF, Roy MA, Stewart TA, Wood WI; Ashkenazi A, Filvaroff E, Godowski PJ, Mather JP,

Williams PM,

New secreted and transmembrane polypeptides useful for treating skin, neurodegenerative diseases, asthma, rheumatoid arthritis, psoriasis and multiple sclerosis.

Claim 2; SEQ ID NO 256; 471pp; English.

The invention discloses isolated PRO secreted/transmembrane polypeptides and the nucleic acid encoding them. The polypeptides can be used to raise antibodies that specifically bind to the PRO polypeptide, for linking a bloactive molecule to a cell expressing a PRO protein and for modulating

Sequence 1100 BP; 225 A; 321 C; 314 G; 240 T; 0 U; 0 Other;

ö 240 GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGGCGGCGCCGTTATCAGGACCATGCGGCCG 120 121 ACGGGTCATCACGTCGCGCATCGTGGGTGGAGAGGACGCCGAACTCGGGCGTTGGCCGTG 180 183 243 123 CTGGGCACTCACGGCGCGCCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCTCCGG 300 cresecacreacescescescescrecrrrsaaacerarasteacerrasreareceress 303 GTGGATGGTCCAGTTTGGCCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTA 360 Gregarderccaerrresccaecreacriccareccarccrrcrescaeccrecaegccra 363 9 63 ACGGCTCATCACGTCGCGCATCGTGGGTGGAGAGACGCCCGAACTCGGGCGTTGGCCGTG GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG GGCTGGACTCAGGAAGCCGGAGTCGCAGGAGCCGCCGCTTATCAGGACCATGCGGCCG GCAGGGGAGCCTGCGCCTGTGGGATTCCCACGTATGCGGAGTGAGCCTGCTCAGCCACCG Gaps ; 0 Length 1100; 4; Indels 99.1%; Score 1090.6; DB 9; 99.6%; Pred. No. 4.4e-227; 0; Mismatches Matches 1093; Conservative Similarity ч 61 124 181 184 241 244 301 304 Query Match Local 셤 ઠે ò g ò 줘. ò 셤 δ 셤

361 8

CTACACCCGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACC 420

WPI; 2003-503392/47.

P-PSDB; ADA18318.

		541 CTGGGGGTACATCAAAGAGGATGAGGCACTGCCATCCCCCACCCTCCAGGAAGTTCA 600	601 GGTCGCCATCATAAACAACTCTATGTGCAACCACCTCTTCCTCAAGTACAGTTTCCGCAA 660 	661 GGACATCTTTGGAGACATGGTTTGTGCTGCAATGCCCAAGGCGGGAAGGATGCCTGCTT 720 	721 CGGTGACTCAGGTGGACCCTTGGCCTGTAACAAGGATGGACTGTGGTATCAGATTGGAGT 780 	781 CGTGAGCTGGGGGGGGGGGCCGATCGGCCCGGTGTCTACACCAATATCAG 840 	841 CCACCACTTTGAGTGGATCCAGAAGCTGATGGCCCAGAGTGGCCATGTCCCAGCCAG	901 CTCCTGGCCGCTACTCTTTTCCCTCTTCTCGGCTCTCCCACTCCTGGGGCCGGTCTG 960	961 AGCCTACCTGAGCCCATGCCACTGGGGCCACTGCCAAGTCAGGCCCTGGTTCTCTTCTG 1020 	021 TCTTGTTTGGTAATAACACATTCCAGTTGATGCCTTGCAGGGCATTTTTCAAAAAAA 1080 	081 AAAAAAAAAAAAAA 1097
364	481	541	601	661	721	781	841	901	961	1021	1081
움상성	1 & a	ò 8	8 %	& 43	% q	oy G	oy Op	yy d	Qy Dp	λ P	Qy Db

Search completed: March 4, 2005, 23:13:35 Job time : 683.27 secs